

# Cancer Incidence and Mortality in New Jersey 1996 -2000

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## **INTRODUCTION**

This report presents statewide, age-adjusted incidence rates for all cancers diagnosed among New Jersey residents during the period 1996-2000, mortality rates for the period 1996-1999 and comparisons of state and national rates for 1995-1999. The incidence data for 2000 should be considered preliminary.

The primary goal of this report is to provide 1996-2000 data to health planners, researchers and the public. Data are provided statewide for six population subgroups: white males, white females, black males, black females, Hispanic males and Hispanic females. Rates are also provided by gender for all races combined. Due to the growing Hispanic population and interest in their cancer rates, we are including Hispanic cancer data in our annual incidence and mortality reports, for the first time.

In viewing the tables of this report, it should also be noted that the annual rates for relatively uncommon cancers tend to fluctuate substantially from year to year because of small numbers of cases, particularly in minority populations. It should also be noted that minor fluctuations might be seen from previous incidence reports due to ongoing editing and review of the data. Compared to preliminary data for 1999 published in our last report, 1999 incidence rates for total cancer in this report increased by 4.1% for males and 2.3% for females. Similarly, the 2000 incidence rates presented here are expected to increase by the time all data are complete.

For each year, the age-adjusted incidence and mortality rates per 100,000 population are shown for 63 categories of cancer sites and for all sites combined. For females, breast cancer *in situ* statistics are shown but not included in the totals for all sites combined (as is standard practice for publication of cancer rates in the United States). For males and females, bladder cancer *in situ* statistics are included in urinary bladder, urinary system and all sites, in accordance with standard practice.

## **CHANGES IN POPULATION STANDARD AND DENOMINATORS FOR 2000**

### **Age-adjusted rates and the Year 2000 Standard**

The U.S. Department of Health and Human Services requires that, beginning with 1999 reporting year, health data should be age-adjusted using the U.S. Year 2000 population as a standard. Until now, various federal and state agencies have calculated disease rates using different U.S. population standards, including the 1940 and 1970 populations. Our prior incidence report on 1995-1999 data, issued in September 2001, used the former 1970 Population Standard for all five years and also illustrated the effect on 1999 incidence rates by changing the population standard from 1970 to 2000.

Today, people are tending to live longer than in the past and the average age of the U.S. population is greater than it was thirty years ago. Consequently, since cancer occurs more frequently in older people, today's U.S. populations will tend to have more cases of cancer than in the past. Calculation of disease rates based on the 2000 population structure provides a more realistic and consistent standard of measurement.

The age-adjusted rate is calculated by applying a series of weights to the age-specific rates. The weights are the respective proportions of the standard population in each age group. The new 2000 population standard reflects the age distribution of the current U.S. population and therefore has higher weights in older age groups. For example, the 2000 standard population has higher weights than the 1970 standard population for all groups age 70 and over. A more complete discussion of this topic is available in our last incidence report, *Cancer Incidence in New Jersey, 1995-1999* and can be found through our web site at <http://www.state.nj.us/health/cancer/statistics.htm>.

The new calculation using the 2000 standard population does not indicate a change in cancer incidence or occurrence—only a different representation of the rates of reported diseases. The new calculations produce standardized cancer rates that appear to be about 20% higher than previously reported.

### **Population Denominators for 2000**

With the introduction of year 2000 incidence data, one must take into account the new way in which the U.S. Bureau of the Census collected population data. With the 2000 Census, individuals were given the opportunity to categorize themselves as more than one race. For the first time, individuals could "mark [X] one or more races to indicate what this person considers himself/herself to be". Because of this change, 2000 populations for "White only" and "Black only" became 4-6% lower than 1999 populations in New Jersey. The lower population denominator produces in turn, higher age-adjusted rates among whites and blacks for the year 2000. Therefore, caution must be taken in interpreting 2000 incidence rates since it is not clear if an apparent rate change is actual or an artifact of the new way in which the U.S. Bureau of the Census collected race data for 2000.

Furthermore, population estimates used to calculate rates, especially race-specific rates, have recently been found to differ from the 2000 census counts. The National Center for Health Statistics and the National Cancer Institute are studying this issue. Revised population data may be issued in the future that would change rate calculations. The rates presented in this report are produced following all current national guidelines.

## **SUMMARY OF NEW JERSEY CANCER INCIDENCE DATA, 1996-2000**

*(Standardized to U.S. 2000 Population)*

A total of 44,562 cases of invasive cancer diagnosed in 2000 among New Jersey residents were reported to the NJSCR. During the period 1996-2000, a total of 221,868 cases of invasive cancer were diagnosed among New Jersey residents, 51% among males and 49% among females.

During 1996-2000, overall age-adjusted cancer incidence rates have declined for males since 1997 and for females since 1998. This is also reflected nationally where cancer incidence stabilized for the years 1995-1999. The overall incidence rates decreased steadily for black males who for many years have had the highest rates.

Lung cancer incidence rates for males dropped markedly in 1999 and 2000. Female lung cancer incidence rates appear stable over the period, declining somewhat in 2000. Incidence rates for colon cancer have been fairly stable for both males and females, although rates declined since 1998. A gradual decline in stomach cancer incidence rates is seen for males and females.

Prostate cancer rates have been fluctuating, possibly reflecting a variable use of PSA screening. Invasive breast cancer incidence rates for females have declined slightly since 1997, consistent with continued improvements in screening and early detection, while *in situ* breast cancer rates are still on the rise. Cervical cancer incidence rates decreased steadily.

Thyroid cancer incidence rates have increased for both males and females. We have included a special set of tables on thyroid cancer to highlight this observation. New Jersey thyroid cancer rates are lower than those of the nation but appear to be rising faster than the comparable rates in the U.S. Malignant melanoma and non-Hodgkin lymphoma incidence rates appear to be stabilizing in the most recent years among both males and females. These cancer types had previously been rising rapidly in New Jersey and the nation.

### **New Jersey Cancer Incidence Rates by Gender, Race and Ethnicity, 1996-2000**

Tables 1 through 8 display the total counts of all newly diagnosed cases of cancer in New Jersey and the age-adjusted incidence rates by gender and race and for Hispanic ethnicity for the period 1996 through 2000. Each year of data is presented separately except for Hispanics where the data are grouped for the 5 years.

In the paragraphs below, we note the most striking patterns indicated in these tables according to gender and the largest race subgroups, also taking into account fluctuations and trends in incidence data for years prior to 1996. Year 2000 data may show apparent interruptions of race-specific trends due to the way in which the Census collected race specific populations (see discussion under the previous section, *Population Denominators for 2000*). The option for choosing multiple races produced artificially inflated 2000 age-adjusted rates among whites and blacks for this report.

Incidence data for earlier years can be viewed on the NJDHSS website, <http://www.state.nj.us/health/> and can also be found in our previous cancer incidence reports.

**Males (Tables 1, 3 & 5):** During the years 1996-2000, the overall cancer incidence rate declined for all males. Taking into account that the age-adjusted rates for race subgroups for 2000 may be inflated by the new Census practice, overall cancer incidence rates for white males also declined and has continued to decline steadily for black males during these years. Although lung cancer incidence rates appear stable among all males, white males, and black males through 1997, the rates dropped markedly in the past two years. Prostate cancer incidence rates seem stable overall but fluctuate for whites and blacks males alone. Incidence rates for colon cancer have been stable overall but are slightly decreasing for white males.

Thyroid cancer incidence rates have increased for males, a trend similar to that seen for the U.S. (See Table 8). Incidence rates for cancer of the small intestine, which was previously increasing slightly, appears to be leveling off. Incidence rates for laryngeal cancer continue to decrease slightly. A slight decline in oropharyngeal cancer incidence is seen among white males. Incidence rates for non-Hodgkin lymphoma and malignant melanoma of the skin appear to be stabilizing for males.

**Females (Tables 2, 4 & 6):** During the period 1996-2000, the overall cancer incidence rate for females peaked in 1998 and is now decreasing. Taking into account that the age-adjusted rates for race subgroups for 2000 may be inflated by the new Census practice, overall cancer incidence rates for white and black females seem to be following this same pattern. Incidence rates of lung cancer are stable for white women and show a slight drop in 2000 for black women. Colorectal cancer incidence rates have declined since 1998 for all females. Invasive breast cancer incidence rates declined slightly since 1997 while *in situ* breast cancer rates rose during these years. Declines continued to be seen for invasive cervical cancer among all females.

Thyroid cancer incidence rates for females have steadily increased over the past few years. New Jersey thyroid cancer incidence rates are slightly lower than those for the U.S. (See Table 9). Thyroid cancer rates for females are increasing at a faster rate than for males. Incidence rates for non-Hodgkin lymphoma and malignant melanoma of the skin appear to be stabilizing.

Among black females, the incidence rates for total cancer and other major cancer sites show a decreasing pattern since 1998 but increasing rates are seen for pancreatic cancer during these years.

**Hispanic, Males & Females (Table 7):** The overall cancer incidence rates for Hispanic males and females for the cumulative years 1996-2000 are lower than for all males and females combined during this same time period. Rates by individual years could not be presented due to small numbers. Hispanic males continue to have higher incidence rates compared with Hispanic females, consistent with differences in cancer rates between genders in the overall population.



As originally noted in our report, *Cancer Among Hispanics in New Jersey, 1990-1996*, Hispanics continue to have higher incidence rates for cervical, stomach, gallbladder and liver cancers compared with the general population. For more details, you may view that report on our web site at

<http://www.state.nj.us/health/cancer/hispanic/>.

### **Comparison of Cancer Incidence Data for New Jersey with the United States, 1995-1999**

Tables 10 and 11 compare New Jersey age-adjusted incidence rates to those of the U.S. using data published in *Cancer in North America* by the North American Association of Central Cancer Registries (NAACCR). The most recent detailed data available from NAACCR are for 1995-1999 and we present comparison tables for major sites for this time period. These tables show the comparable incidence rates for total cancer and for three of the most common sites of cancer for males and females, as well as the comparable rates for two types of cancer that have been increasing nationally during the past decade, melanoma and non-Hodgkin lymphoma. Historically, New Jersey rates have been representative of the Northeast region, which tends to have higher cancer incidence rates than the U.S. as a whole.

For males (Table 10) all races combined, total cancer incidence rates were higher for New Jersey than the U.S. during the period 1995-1999. The incidence rates for colorectal and prostate cancers and non-Hodgkin lymphoma were higher than those for the total U.S. Lung cancer incidence rates for New Jersey were higher for all races and whites but lower among blacks compared to the nation. Melanoma incidence rates for New Jersey were higher than the U.S. for all race and whites but similar among blacks.

For females (Table 11), New Jersey had higher incidence rates than the U.S. during the period 1995-1999 for total cancers, lung, breast and colorectal cancers and non-Hodgkin lymphoma. Melanoma incidence rates for New Jersey females and the U.S. were similar.

### **SUMMARY OF NEW JERSEY CANCER MORTALITY DATA, 1996-1999**

*(Standardized to U.S. 2000 Population)*

Beginning with the year 1999, coding and classification for cause of death comes from a new manual, the tenth revision of the World Health Organization's International Classification of Disease (ICD-10). From 1979-1998, cause of death coding was based on the ninth revision (ICD-9). Changes in classification detail, coding rules, and classification code numbers with this new version have caused some discontinuities in trends for cancer deaths. Although these discontinuities vary, research has found that using ICD-10 assigns approximately 0.7% more deaths to the category of cancer, which may slightly increase resulting site-specific mortality rates for 1999 and later.

The New Jersey cancer mortality data through 1999 reflect many trends observed throughout the nation. Cancer mortality rates of the U.S. have been on the decline since 1991 and the decline has been more rapid since 1995. This decline is more apparent among New Jersey men than women. Research suggests that advances in treatment and increased screening have helped reduce mortality from cancer. Declines in smoking rates are also believed to have contributed to the decreases, especially in males. New Jersey cancer mortality data for this report were obtained through the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) Program from the National Center for Health Statistics. At the time of this report year 2000 mortality data were unavailable.

### **New Jersey Cancer Mortality Rates by Gender, Race & Ethnicity, 1996-1999**

There were 18,177 deaths in 1999 for which cancer was designated on the death certificates as the underlying cause. During the period 1996-1999, 72,683 deaths from cancer occurred among New Jersey residents, 50% among males and 50% among females. Tables 12-17 display the total counts of deaths from cancer in New Jersey and age-adjusted mortality rates by race and gender for the period 1996 through 1999. Table 18 displays age-adjusted mortality rates and counts by gender for those of Hispanic ethnicity in New Jersey for the combined years 1996-1999.

In the paragraphs below, we note the most striking patterns indicated in Tables 12 through 18 according to gender and population subgroups. Mortality trends are also compared to the incidence data in Tables 1 through 6 described previously.

**Males (Tables 12, 14 & 16):** During the years 1996-1999, the overall cancer mortality rate for males decreased (Table 12), paralleling the slight decreasing trend in incidence rates over the past few years. In particular, downward trends in cancer mortality rates were seen for male lung and melanoma of the skin. Decreases in prostate cancer mortality rates continued as incidence remained steady. A slight decline in oropharyngeal cancer mortality rates is also seen. Except for a slight rise in 1999, colorectal cancer mortality rates for males have been decreasing slowly along with incidence rates.

For white males (Table 14), the trends for the most common cancers were similar to those for all males combined. Although cancer mortality rates for black males (Table 16) have been significantly higher than for white males, they continue to show an overall downward trend. Mortality rates for colorectal and stomach cancers among black males have decreased markedly.

**Females (Tables 13, 15 & 17):** During the years 1996-1999, the overall cancer mortality rate for females showed a downward trend (Table 13). The decreasing breast cancer mortality rates are consistent with the trend toward earlier diagnoses for breast cancers. Similar to incidence rates, the increasing female mortality rates for lung cancer may have peaked in 1997 and now appear to be

decreasing. There was a downward trend in oropharyngeal cancer mortality. For female colorectal, uterine corpus and cervical cancers, mortality rates showed no clear trend while

ovarian cancer mortality was stable over this time period. Non-Hodgkin lymphoma mortality rates seem to be stabilizing in females, similar to incidence rates.

For white females (Table 15), the cancer mortality trends for most common cancers were similar to those for all females combined. For black females (Table 17), overall cancer mortality rates were only slightly higher than those for white females and not as high as for black males. Mortality rates for breast cancer for black females remain higher than for white females, but showed a strong downward trend during the 4-year period. Since 1998 mortality rates have been decreasing for colorectal, esophageal and uterine cancers among black females. Pancreatic cancer mortality rates show an increasing trend for black females, following the pattern with incidence.

**Hispanic Males & Females (Table 18):** Overall cancer mortality rates for males and females of Hispanic ethnicity are much lower than that for males and females of all races in New Jersey. Rates by individual years could not be presented due to small numbers. Mortality rates are generally higher for Hispanic males compared with females.

#### **Comparison of Cancer Mortality Data for New Jersey with the United States, 1995-1999 (Tables 19-20)**

For all cancer sites combined, New Jersey cancer mortality rates were higher among males than the corresponding rates for the U.S. However, mortality rates for black males were somewhat lower in New Jersey than the comparable rate for the U.S. Lung cancer mortality rates in males were lower in New Jersey than for the nation. Mortality rates for colorectal cancer and prostate cancer were higher in New Jersey than the U.S. except among black males for whom prostate cancer mortality rates were lower in New Jersey than the U.S.

Among females, the mortality rates for all sites combined, lung, colorectal, and breast cancers were higher in New Jersey than the U.S. as a whole during this five-year period.

## TECHNICAL NOTES

### Registry Overview

The objectives of the New Jersey State Cancer Registry (NJSCR) are to:

- \* monitor cancer trends in New Jersey
- \* promote scientific research
- \* respond to New Jersey residents about cancer concerns
- \* educate the public
- \* provide information for planning and evaluating cancer prevention and control activities and
- \* share and compare cancer data with other states and the nation.

The New Jersey State Cancer Registry is a population-based incidence registry that serves the entire state of New Jersey, with a population of approximately 8.4 million people. The NJSCR was established by legislation (NJSA 26:2-104 et. seq.) and includes all cases of cancer diagnosed in New Jersey residents since October 1, 1978. New Jersey regulations (NJAC 8:57A) require the reporting of all newly diagnosed cancer cases to the NJSCR within three months of hospital discharge or six months of diagnosis, whichever is sooner. Reports are filed by hospitals, diagnosing physicians, dentists, and independent clinical laboratories. Every hospital in New Jersey is now reporting cancer cases electronically. In addition, reporting agreements are maintained with New York, Pennsylvania, Delaware, Florida, Maryland, and North Carolina so that New Jersey residents diagnosed with cancer outside the state can be identified. Legislation in 1996 strengthened the Registry by (1) requiring electronic reporting, (2) requiring abstracting by certified tumor registrars and (3) establishing penalties for late or incomplete reporting. Timely reporting of cancer data is required by law.

All primary invasive and *in situ* neoplasms are reportable to the NJSCR, except cervical cancer *in situ* diagnosed after 1994 and certain carcinomas of the skin. The information collected by the NJSCR includes basic patient identifiers, demographic characteristics of the patient, medical information on each cancer diagnosis (such as the anatomic site, histologic type and summary stage of disease), and vital status (alive or deceased) determined annually. For deceased cases, the underlying cause of death is also included. The primary site, behavior, grade, and histology of each cancer are coded according to the *International Classification of Disease for Oncology (ICD-O), 2nd edition*. The NJSCR follows the data standards promulgated by the North American Association of Central Cancer Registries (NAACCR), including the use of the Surveillance, Epidemiology, and End Results (SEER) multiple primary rules.

The NJSCR is a member of NAACCR, an organization that sets standards for cancer registries, facilitates data exchange, and publishes cancer data. The NJSCR been a participant of the National Program of Cancer Registries sponsored by the Centers for Disease Control and Prevention since it began in 1994 and is one of the National Cancer Institute's SEER expansion registries.

### **Description of Algorithm for Designating Hispanic Ethnicity**

The NJSCR has used data on birthplace, marital status, race and surname to augment the number of reported cases and decedents with Hispanic ethnicity in the registry during the years 1990-2000. Only since 1990, are reliable estimates of the Hispanic population by gender and age available.

The method used to assign Hispanic ethnicity to cases was adapted from algorithms developed by the Illinois State Cancer Registry (ISCR) and by the NJSCR. The ISCR used the 1990 Census surname list to classify surnames according to the percent of persons with that surname in the U.S. Census who identified themselves as Hispanic.

The ISCR evaluation of their algorithm concluded that 1) surnames and their relationships to Hispanic status presented in the 1990 Census surname list were very similar to those observed for Illinois cancer patients and decedents during years 1986-1996, 2) Hispanic non-U.S. birthplaces were demonstrated to be valid indirect identifiers of Hispanic status, and 3) exclusion of patients and decedents based on race, birthplace and/or surname status from indirect identification was shown to increase positive predictive values for Hispanic status.

The ISCR used the 1990 U.S. Census surname list to assign Hispanic ethnicity. The Census list includes 25,276 Spanish surnames, which were classified into 28 categories based upon the proportion of householders who identified themselves as Hispanic in the 1990 census. These categories were then collapsed into six broad categories: "heavily Hispanic", "generally Hispanic", "moderately Hispanic", "occasionally Hispanic", "rarely Hispanic", and "no match." These categories are defined as follows:

<b>Spanish Surname Classification</b>	<b>Proportion of Householders who identified themselves as Hispanic</b>
Heavily Hispanic	> 75%
Generally Hispanic	51% - 75%
Moderately Hispanic	26% - 50%
Occasionally Hispanic	6% - 25%
Rarely Hispanic	<= 5%
no match	No matching surname on the census list

Birthplace also plays a role in assigning Hispanic ethnicity. There were two groups of birthplaces pertaining to Hispanic ethnicity: (a) birthplaces associated with a high probability of Hispanic ethnicity, and (b) birthplaces associated with a high prevalence of Spanish surnames but low probability of Hispanic ethnicity. The groups are as follows:

<b>High Probability of Hispanic Ethnicity</b>	<b>High Prevalence of Spanish Surnames but Low Probability of Hispanic Ethnicity</b>
Puerto Rico, Mexico, Cuba, Central America (Guatemala, Belize, Honduras, El Salvador, Nicaragua, Costa Rica, Panama), South America (Colombia, Venezuela, Ecuador, Peru, Bolivia, Chile, Argentina, Paraguay, and Uruguay), Spain including Canary Islands, Balearic Island, and Andorra.	Atlantic/Caribbean Area (except Cuba and Puerto Rico); Panama Canal Zone, Brazil, Guyana, Surinam, Hawaii, French Guyana, Europe (except Spain) including Portugal; and Asia including the Philippines.

The procedures of the algorithm are summarized as follows.

1. If the information received from the cancer reporting source has already identified the patient as Hispanic, then the case retains the classification of Hispanic ethnicity.
2. If individuals have heavily Hispanic surnames (maiden names for ever-married women, last names for males, and last names for never-married women or ever-married women without maiden names), they are assigned Hispanic ethnicity with the following exceptions: 1) those who were born in a birthplace associated with high Spanish surname prevalence but low probability of Hispanic ethnicity are non-Hispanic, and 2) those who were American Indian, Filipino or Hawaiian are non-Hispanic.
3. The algorithm assigns those whose birthplace is associated with a high probability of Hispanic ethnicity as Hispanic, except for cases whose surname appears in the rarely Hispanic or no match census Spanish surname categories.

As a result of using the above algorithm, the NJSCR was able to assign an additional 26% of cases as Hispanic to the incidence data. This enhancement is consistent with that reported by the ISCR. Hispanic mortality data for this report were obtained from NCI's SEER Program and did not have the algorithm applied to them. In our detailed report, *Cancer Among Hispanics in New Jersey, 1990-1996*, the algorithm was applied to mortality data from the New Jersey Center for Health Statistics producing somewhat higher rates than what is seen here for 1996-1999.

## **Data Sources**

New Jersey cancer incidence data were taken from the August 2002 analytic file and tabulated using SEER\*Stat (<http://seer.cancer.gov/ScientificSystems/SEERStat/>), a statistical software package distributed by the National Cancer Institute. New Jersey cancer mortality data were taken from the National Cancer Institute's SEER Program and also tabulated using SEER\*Stat. U.S. cancer incidence and mortality data were obtained from NAACCR's publication, *Cancer in North America 1995-1999*. The 1996-1999 population estimates were provided by the National Cancer Institute's SEER Program and the 2000 population estimates were provided by the U.S. Census Bureau.

For this report, rates were calculated for invasive cancers only with the exception of cancer of the bladder, for which *in situ* cases are included. The reason for excluding the *in situ* cases for most of the report is that data on cancer incidence for the U.S. exclude *in situ* cases or include *in situ* cases separately from the invasive cases. Statistics for *in situ* cancers of the breast are presented but are not included in the statistics for all sites.

Out-of-state residents are excluded from New Jersey rates. Persons of unknown age and/or gender would also be excluded however there were none. Race-specific information is not shown separately for persons of non-white or non-black races (including unknown race), but this information is included in the "all races" data.

The NJSCR also follows the guidelines and standard practices of the SEER Program in determining multiple primary cancers for an individual. An individual may develop more than one type of cancer within a given year. Following the SEER multiple primary rules, patients could therefore be counted more than once if they were diagnosed with two or more primary cancers.

## **Data Quality**

NAACCR has awarded the NJSCR the Gold Standard, the highest standard possible, for the quality of the 1995 through 1999 data. The criteria used to judge the quality of the data were completeness of cancer case ascertainment, completeness of certain information on the cancer cases, percent of death certificate only cases, percent of duplicate cases, passing an editing program, and timeliness. The NJSCR has consistently achieved the highest level of certification for its data since the inception of this award.

Completeness of reporting was estimated by comparing New Jersey and U.S. incidence to mortality ratios for whites, standardized for age, gender, and cancer site. The data used to generate these ratios were the cancer incidence rates for all SEER registries combined. Using these standard formulae, it is possible for the estimation of completeness to be greater than 100%. For 2000, the completeness of case reporting was estimated as 100.4% when this report was prepared. In contrast, the 1999 rates for the comparable incidence report for the years 1995-1999, which the New Jersey Department of Health & Senior Services issued in September of 2001, was calculated to be 104% at that time.

While our estimates of completeness are very high, some cases of cancer among New Jersey residents who were diagnosed and/or treated in out-of-state facilities may not yet have been reported to New Jersey by other state registries. This fact should be considered in interpreting the data for the more recent years. However, these relatively few cases will not significantly affect the cancer rates, or alter the overall trends presented in this report.

Other 2000 data quality indicators measured were as follows:

Incidence:

Percent death-certificate-only cases: 1.7%

Percent of unresolved duplicates: 0.02%

Percent of unknown race: 0.0%

Number of unknown age: 0

Number of unknown gender: 0

### **Calculation of Rates**

A cancer incidence rate is defined as the number of new cases of cancer detected during a specified time period in a specified population. These rates are most commonly expressed as cases per 100,000 population. Cancer occurs at different rates in different age groups, and population subgroups defined by gender and race have different age distributions. Therefore, before a valid comparison can be made between rates, it is necessary not only to adjust the rates by age but also to standardize the rates to the age distribution of a standard population. In this report, the 2000 U.S. population standard was used. Records that were missing gender, age, or race could not be included in the rates presented in this report. Since the number of records so affected are very small, the rates are virtually unaffected by the non-inclusion of these records.

The first step in this procedure was to determine the age-specific rates. For each age group for a given time interval (within each race-gender group, for the entire state), the following formula was applied:

$$r_a = \frac{n_a}{t \times P_a}$$

where:

$r_a$  = the age-specific rate for age group a,

$n_a$  = the number of events (cancer diagnoses) in the age group during the time interval,

$t$  = the length of the time interval (in years), and



$P_a$  = average size of the population in the age group during the time interval (mid- year population or average of mid-year population sizes).

In order to determine the age-adjusted and standardized rate, a weighted average of the age-specific rates was calculated, using the age distribution of the standard population to derive the age-specific weighting factors (Rothman, 1986). This is the technique of direct standardization, which uses the following formula:

$$R = \frac{\sum_{a=1}^n r_a \times Std. P_a}{\sum_{a=1}^n Std. P_a}$$

where:

$R$  = the age-adjusted rate

$r_a$  = the age-specific rate for age group  $a$ , and

$Std.P_a$  = the size of the standard population in each age group  $a$ .

While age adjustment and standardization facilitates the comparison of rates among different populations, there can be important age-specific differences in disease occurrence, which are not apparent in comparisons of the age-adjusted rates (Breslow and Day, 1987).

Analogous definitions and calculations apply for cancer mortality rates.

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**Table 1. Age-adjusted Incidence Rates, Males All Races Combined**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>All Sites</b>	113,250	628.3	634.9	628.4	615.7	613.1
<b>Oral Cavity and Pharynx</b>	2,947	16.6	16.4	16.1	14.6	15.1
Lip	143	0.8	1.0	0.9	0.6	0.7
Tongue	781	4.2	3.7	4.8	4.0	3.9
Salivary Gland	297	1.5	1.8	1.8	1.4	1.8
Floor of Mouth	233	1.4	1.5	1.2	1.2	0.8
Gum and Other Mouth	398	2.5	2.3	2.1	1.8	2.0
Nasopharynx	191	0.9	0.9	1.0	1.1	1.1
Tonsil	363	2.0	1.7	2.0	1.6	2.1
Oropharynx	126	0.6	0.9	0.4	0.6	0.8
Hypopharynx	291	1.8	1.5	1.3	1.5	1.6
<b>Digestive System</b>	23,158	130.3	131.8	134.1	129.8	125.4
Esophagus	1,623	8.7	8.8	9.4	8.7	8.9
Stomach	2,595	15.1	15.6	15.2	15.0	12.4
Small Intestine	358	1.6	1.7	2.1	2.3	2.1
Colon and Rectum	13,856	79.7	79.5	79.5	77.8	75.4
Colon excluding Rectum	9,643	55.7	56.4	56.0	54.8	52.5
Rectum and Rectosigmoid Junction	4,213	24.1	23.1	23.5	22.9	22.8
Anus, Anal Canal and Anorectum	181	0.7	1.3	1.1	1.2	0.6
Liver and Intrahepatic Bile Duct	1,421	7.8	7.1	8.0	7.1	8.8
Liver	1,245	6.7	6.0	6.9	6.2	7.8
Intrahepatic Bile Duct	176	1.0	1.2	1.1	0.9	1.0
Gallbladder	206	1.3	1.5	1.3	0.8	1.1
Pancreas	2,384	13.0	13.2	13.8	13.9	13.2
<b>Respiratory System</b>	18,914	108.8	108.2	108.5	98.2	98.8
Larynx	1,574	9.1	9.3	8.6	7.6	8.1
Lung and Bronchus	16,609	95.3	94.9	95.8	87.0	86.7
<b>Bones and Joints</b>	228	1.6	1.1	1.3	1.1	1.0
<b>Soft Tissue (Including Heart)</b>	710	3.8	3.7	4.0	4.0	3.5
<b>Skin (Excluding Basal and Squamous)</b>	4,226	23.1	24.5	22.5	22.0	21.9
Melanoma of the Skin	3,691	19.4	21.9	19.5	19.7	19.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 1 (continued). Age-adjusted Incidence Rates, Males All Races Combined**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>Breast</b>	315	1.7	1.6	1.4	1.7	2.2
<b>Male Genital System</b>	36,443	196.8	205.7	190.9	198.6	203.6
Prostate	35,139	190.8	199.4	184.1	191.8	196.8
Testis	1,104	5.0	5.3	5.5	5.8	5.5
Penis	150	0.6	0.8	1.1	0.7	1.1
<b>Urinary System</b>	11,506	62.2	62.6	65.5	66.4	64.4
Urinary Bladder (Including in situ)	7,870	42.9	44.2	44.7	46.3	44.6
Kidney and Renal Pelvis	3,363	18.2	17.1	18.9	18.3	18.1
Ureter	185	0.8	1.0	1.3	1.1	1.1
<b>Eye and Orbit</b>	201	1.1	1.2	1.1	0.6	1.2
<b>Brain and Other Nervous System</b>	1,595	8.2	8.7	8.7	7.9	8.3
Brain	1,493	7.8	8.1	8.2	7.3	7.8
<b>Endocrine System</b>	927	3.7	4.2	4.9	5.3	5.8
Thyroid	760	2.9	3.4	4.0	4.3	4.9
<b>Lymphomas</b>	5,455	30.4	28.6	31.0	29.2	28.0
Hodgkin Lymphoma	710	3.9	3.5	3.8	3.8	3.3
Non-Hodgkin Lymphoma	4,745	26.5	25.1	27.2	25.5	24.8
<b>Myelomas</b>	1,257	6.8	7.1	7.4	6.6	7.2
<b>Leukemias</b>	2,850	16.9	15.8	16.2	16.0	13.8
Lymphocytic Leukemia	1,206	7.4	5.9	7.3	6.9	5.9
Acute Lymphocytic Leukemia	324	1.9	1.5	2.1	1.8	1.1
Chronic Lymphocytic Leukemia	848	5.3	4.3	5.1	4.9	4.6
Myeloid Leukemia	1,253	7.5	7.7	6.6	6.5	5.9
Acute Myeloid Leukemia	822	4.9	4.9	4.3	4.6	3.9
Chronic Myeloid Leukemia	405	2.4	2.6	2.2	1.8	1.9
Monocytic Leukemia	56	0.1	0.3	0.4	0.4	0.3
Other Leukemia	335	1.9	1.9	2.0	2.1	1.7
<b>Ill-Defined &amp; Unspecified Sites</b>	2,518	16.3	13.7	14.9	14.0	12.8

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 2. Age-adjusted Incidence Rates, Females All Races Combined**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>All Sites</b>	108,618	453.3	463.9	467.1	454.5	443.5
<b>Oral Cavity and Pharynx</b>	1,540	6.9	6.2	6.3	7.2	5.8
Lip	70	0.3	0.3	0.3	0.3	0.2
Tongue	378	1.8	1.4	1.5	1.8	1.5
Salivary Gland	254	1.3	1.1	1.2	0.9	1.0
Floor of Mouth	118	0.6	0.6	0.6	0.4	0.4
Gum and Other Mouth	332	1.2	1.3	1.3	1.7	1.2
Nasopharynx	74	0.4	0.3	0.4	0.4	0.2
Tonsil	131	0.7	0.5	0.4	0.8	0.5
Oropharynx	54	0.1	0.1	0.2	0.4	0.3
Hypopharynx	75	0.3	0.4	0.3	0.3	0.3
<b>Digestive System</b>	21,300	84.3	87.5	87.9	83.7	82.0
Esophagus	602	2.2	2.7	2.3	2.5	2.4
Stomach	1,738	7.0	7.2	7.6	6.7	6.2
Small Intestine	309	1.2	1.1	1.3	1.6	1.3
Colon and Rectum	13,767	54.8	56.4	57.5	53.3	52.4
Colon excluding Rectum	10,333	41.0	42.2	43.0	39.8	38.9
Rectum and Rectosigmoid Junction	3,434	13.8	14.2	14.5	13.5	13.5
Anus, Anal Canal and Anorectum	334	1.4	1.7	1.2	1.3	1.4
Liver and Intrahepatic Bile Duct	706	2.7	2.9	2.7	2.8	3.0
Liver	504	2.0	2.3	1.7	2.1	2.1
Intrahepatic Bile Duct	202	0.7	0.7	1.0	0.7	0.9
Gallbladder	446	2.0	1.8	1.8	1.8	1.5
Pancreas	2,827	10.9	11.5	11.3	11.2	11.3
<b>Respiratory System</b>	14,257	59.3	59.1	60.2	58.9	56.7
Larynx	424	2.0	1.7	2.2	1.6	1.6
Lung and Bronchus	13,518	56.0	55.9	56.8	56.0	53.9
<b>Bones and Joints</b>	218	1.0	1.0	1.3	0.9	0.9
<b>Soft Tissue (Including Heart)</b>	647	2.6	3.3	2.8	2.4	3.0
<b>Skin (Excluding Basal and Squamous)</b>	3,047	12.2	14.4	13.3	12.7	13.3
Melanoma of the Skin	2,759	10.8	13.1	11.9	11.7	12.2
<b>Breast (Invasive)</b>	32,337	137.5	142.3	141.9	140.4	135.4
in situ (not included in All Sites)	7,007	23.2	25.9	28.4	30.1	28.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 2 (continued). Age-adjusted Incidence Rates, Females All Races Combined**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>Female Genital System</b>	14,345	62.7	62.0	63.9	62.1	59.0
Cervix Uteri	2,452	12.4	11.3	10.9	10.5	9.7
Corpus and Uterus, NOS	6,732	28.2	28.3	30.1	29.9	27.9
Corpus Uteri	6,449	27.0	27.0	28.6	28.8	26.9
Uterus, NOS	283	1.2	1.3	1.5	1.1	1.0
Ovary	4,245	18.8	18.1	19.0	18.2	17.6
Vagina	160	0.5	1.0	0.5	0.6	0.7
Vulva	593	2.2	2.6	2.7	2.1	2.4
<b>Urinary System</b>	5,267	20.9	22.2	21.4	21.8	21.1
Urinary Bladder (Including in situ)	2,958	11.7	12.1	11.7	11.3	12.6
Kidney and Renal Pelvis	2,165	8.5	9.5	9.3	9.8	8.1
Ureter	105	0.5	0.5	0.4	0.5	0.3
<b>Eye and Orbit</b>	172	0.9	0.7	0.9	0.5	0.7
<b>Brain and Other Nervous System</b>	1,422	6.3	6.0	6.4	6.5	6.0
Brain	1,293	5.7	5.5	5.6	6.0	5.5
<b>Endocrine System</b>	2,402	9.5	8.9	10.3	11.5	14.6
Thyroid	2,259	8.9	8.3	9.5	11.0	14.0
<b>Lymphomas</b>	5,086	20.8	22.5	22.9	21.1	20.4
Hodgkin Lymphoma	644	3.2	2.9	3.2	3.1	3.0
Non-Hodgkin Lymphoma	4,442	17.6	19.6	19.7	18.1	17.4
<b>Myelomas</b>	1,219	4.7	5.1	5.4	4.5	5.0
<b>Leukemias</b>	2,289	10.0	10.2	9.3	9.2	9.2
Lymphocytic Leukemia	921	3.8	4.2	3.6	3.9	4.0
Acute Lymphocytic Leukemia	270	1.4	1.3	1.3	1.2	1.4
Chronic Lymphocytic Leukemia	619	2.3	2.8	2.2	2.6	2.5
Myeloid Leukemia	1,026	5.0	4.3	4.3	4.1	3.9
Acute Myeloid Leukemia	742	3.8	3.0	3.0	3.0	2.9
Chronic Myeloid Leukemia	266	1.1	1.3	1.1	1.1	1.0
Monocytic Leukemia	49	0.1	0.2	0.3	0.1	0.2
Other Leukemia	293	1.1	1.4	1.2	1.1	1.0
<b>III-Defined &amp; Unspecified Sites</b>	3,070	13.7	12.6	12.8	11.1	10.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 3. Age-adjusted Incidence Rates, White Males**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>All Sites</b>	97,899	624.0	631.2	626.6	617.3	632.0
<b>Oral Cavity and Pharynx</b>	2,372	15.9	15.5	14.5	14.2	14.9
Lip	140	0.9	1.2	1.0	0.7	0.9
Tongue	636	4.0	3.7	4.6	3.8	4.0
Salivary Gland	258	1.5	1.8	1.8	1.4	2.0
Floor of Mouth	192	1.4	1.5	1.0	1.2	0.9
Gum and Other Mouth	319	2.3	2.0	2.0	1.8	2.0
Nasopharynx	128	0.8	0.7	0.6	1.0	0.8
Tonsil	294	2.0	1.7	1.7	1.6	2.1
Oropharynx	95	0.5	0.8	0.3	0.6	0.8
Hypopharynx	212	1.7	1.4	0.9	1.4	1.3
<b>Digestive System</b>	19,999	129.5	130.6	132.0	129.1	128.1
Esophagus	1,325	8.0	8.1	8.8	8.5	8.8
Stomach	2,147	14.2	14.9	14.5	14.4	12.0
Small Intestine	291	1.5	1.6	2.0	2.0	2.1
Colon and Rectum	12,274	81.2	80.7	80.3	79.0	78.4
Colon excluding Rectum	8,516	56.0	57.2	56.5	55.1	54.4
Rectum and Rectosigmoid Junction	3,758	25.1	23.5	23.8	23.8	24.0
Anus, Anal Canal and Anorectum	145	0.7	1.2	1.0	1.1	0.6
Liver and Intrahepatic Bile Duct	1,116	7.2	6.2	7.2	6.5	8.6
Liver	969	6.2	5.3	6.2	5.7	7.5
Intrahepatic Bile Duct	147	1.0	1.0	1.0	0.9	1.1
Gallbladder	178	1.2	1.5	1.3	0.8	1.1
Pancreas	2,062	13.2	13.1	13.6	13.4	13.7
<b>Respiratory System</b>	16,242	106.8	106.6	107.2	97.2	100.2
Larynx	1,288	8.4	8.8	8.4	7.3	7.8
Lung and Bronchus	14,280	93.7	93.6	94.4	86.1	87.8
<b>Bones and Joints</b>	192	1.5	1.1	1.3	1.1	1.2
<b>Soft Tissue (Including Heart)</b>	613	3.9	3.7	4.3	4.0	3.8
<b>Skin (Excluding Basal and Squamous)</b>	4,052	25.2	27.4	25.3	25.0	26.1
Melanoma of the Skin	3,643	22.1	25.1	22.5	22.9	23.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 3 (continued). Age-adjusted Incidence Rates, White Males**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>Breast</b>	277	1.7	1.5	1.5	1.6	2.4
<b>Male Genital System</b>	30,711	189.4	197.9	186.6	193.1	202.9
Prostate	29,496	182.4	190.5	178.7	185.2	194.4
Testis	1,044	6.0	6.3	6.5	7.0	7.2
Penis	125	0.5	0.8	1.1	0.6	1.1
<b>Urinary System</b>	10,628	65.6	65.7	69.6	71.1	69.9
Urinary Bladder (Including in situ)	7,441	46.3	47.1	48.2	50.6	48.9
Kidney and Renal Pelvis	2,926	18.1	17.1	19.3	18.7	19.1
Ureter	179	0.9	1.1	1.4	1.2	1.2
<b>Eye and Orbit</b>	186	1.2	1.5	1.1	0.7	1.4
<b>Brain and Other Nervous System</b>	1,405	8.7	9.4	8.9	8.2	9.4
Brain	1,320	8.3	8.9	8.4	7.6	8.9
<b>Endocrine System</b>	807	3.8	4.4	5.3	5.6	6.2
Thyroid	670	3.1	3.6	4.4	4.7	5.3
<b>Lymphomas</b>	4,734	30.9	29.9	31.2	29.5	30.4
Hodgkin Lymphoma	592	4.1	3.6	3.9	3.9	3.7
Non-Hodgkin Lymphoma	4,142	26.9	26.2	27.3	25.7	26.8
<b>Myelomas</b>	993	6.1	6.4	6.6	6.0	6.9
<b>Leukemias</b>	2,524	18.0	16.0	16.5	16.5	15.2
Lymphocytic Leukemia	1,076	7.9	6.0	7.7	7.2	6.5
Acute Lymphocytic Leukemia	273	2.1	1.6	2.2	1.7	1.4
Chronic Lymphocytic Leukemia	775	5.6	4.3	5.4	5.2	4.9
Myeloid Leukemia	1,104	8.0	7.8	6.6	6.7	6.4
Acute Myeloid Leukemia	739	5.3	5.0	4.3	4.9	4.3
Chronic Myeloid Leukemia	342	2.5	2.6	2.2	1.6	2.0
Monocytic Leukemia	48	0.2	0.3	0.4	0.4	0.3
Other Leukemia	296	2.0	1.9	1.9	2.1	1.9
<b>Ill-Defined &amp; Unspecified Sites</b>	2,164	15.7	13.7	14.6	14.1	13.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard



**Table 4. Age-adjusted Incidence Rates, White Females**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>All Sites</b>	95,077	467.7	473.9	477.7	467.9	473.0
<b>Oral Cavity and Pharynx</b>	1,303	6.9	6.2	5.9	7.1	6.0
Lip	64	0.2	0.4	0.3	0.3	0.3
Tongue	327	1.8	1.4	1.5	1.7	1.6
Salivary Gland	220	1.4	1.1	1.1	0.9	1.0
Floor of Mouth	100	0.6	0.6	0.5	0.4	0.4
Gum and Other Mouth	286	1.3	1.3	1.2	1.8	1.2
Nasopharynx	48	0.4	0.3	0.2	0.3	0.2
Tonsil	107	0.5	0.5	0.4	0.8	0.5
Oropharynx	45	0.1	0.2	0.2	0.3	0.3
Hypopharynx	61	0.3	0.3	0.3	0.3	0.3
<b>Digestive System</b>	18,441	84.0	86.5	86.6	82.5	82.3
Esophagus	474	2.0	2.2	2.2	2.3	2.2
Stomach	1,390	6.4	6.6	6.9	6.0	5.6
Small Intestine	256	1.1	1.1	1.3	1.3	1.3
Colon and Rectum	12,108	55.6	56.4	57.4	53.3	53.5
Colon excluding Rectum	9,087	41.4	42.2	42.6	39.3	39.9
Rectum and Rectosigmoid Junction	3,021	14.2	14.2	14.8	14.0	13.5
Anus, Anal Canal and Anorectum	295	1.4	1.7	1.3	1.4	1.5
Liver and Intrahepatic Bile Duct	584	2.4	2.9	2.7	2.7	2.7
Liver	399	1.6	2.2	1.6	1.8	1.9
Intrahepatic Bile Duct	185	0.8	0.7	1.1	0.8	0.8
Gallbladder	374	2.0	1.8	1.5	1.7	1.5
Pancreas	2,451	11.0	11.5	11.1	11.1	11.4
<b>Respiratory System</b>	12,673	61.0	60.6	61.3	60.8	60.6
Larynx	354	1.9	1.8	2.0	1.6	1.6
Lung and Bronchus	12,041	57.7	57.3	58.1	57.8	57.7
<b>Bones and Joints</b>	185	1.1	1.1	1.4	0.8	1.0
<b>Soft Tissue (Including Heart)</b>	530	2.6	3.1	2.7	2.6	3.0
<b>Skin (Excluding Basal and Squamous)</b>	2,937	13.8	16.4	15.4	14.9	16.6
Melanoma of the Skin	2,685	12.5	15.0	14.0	14.0	15.5
<b>Breast (Invasive)</b>	28,278	143.2	147.0	146.7	146.8	145.5
in situ (not included in All Sites)	6,126	24.0	27.6	30.1	32.4	30.9

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 4 (continued). Age-adjusted Incidence Rates, White Females**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>Female Genital System</b>	12,384	64.9	62.6	65.5	64.1	63.5
Cervix Uteri	1,846	11.6	10.3	9.9	10.1	9.5
Corpus and Uterus, NOS	5,978	29.7	29.2	31.5	31.7	30.5
Corpus Uteri	5,765	28.7	28.2	30.3	30.7	29.5
Uterus, NOS	213	1.0	1.0	1.2	1.0	1.0
Ovary	3,766	20.2	18.9	19.9	19.1	19.5
Vagina	130	0.5	0.9	0.5	0.5	0.6
Vulva	532	2.3	2.6	2.8	2.1	2.5
<b>Urinary System</b>	4,771	22.1	23.0	22.3	22.6	23.1
Urinary Bladder (Including in situ)	2,735	12.4	12.8	12.4	12.0	14.0
Kidney and Renal Pelvis	1,910	9.0	9.5	9.4	9.9	8.7
Ureter	101	0.5	0.5	0.5	0.5	0.3
<b>Eye and Orbit</b>	166	1.1	0.7	1.0	0.6	0.8
<b>Brain and Other Nervous System</b>	1,263	6.7	6.3	6.8	7.0	6.9
Brain	1,155	6.2	5.8	6.0	6.5	6.3
<b>Endocrine System</b>	2,056	10.2	9.5	11.4	12.5	16.2
Thyroid	1,935	9.5	8.8	10.5	11.9	15.5
<b>Lymphomas</b>	4,490	21.7	23.5	23.8	21.7	22.6
Hodgkin Lymphoma	555	3.5	3.2	3.6	3.3	3.6
Non-Hodgkin Lymphoma	3,935	18.3	20.3	20.2	18.4	19.0
<b>Myelomas</b>	928	4.5	4.4	4.5	3.9	4.3
<b>Leukemias</b>	2,022	10.5	10.4	9.7	9.7	10.0
Lymphocytic Leukemia	825	4.1	4.4	3.8	4.2	4.5
Acute Lymphocytic Leukemia	236	1.5	1.5	1.4	1.4	1.7
Chronic Lymphocytic Leukemia	562	2.4	2.8	2.3	2.8	2.6
Myeloid Leukemia	898	5.1	4.3	4.5	4.3	4.2
Acute Myeloid Leukemia	664	3.9	3.2	3.2	3.2	3.2
Chronic Myeloid Leukemia	220	1.2	1.1	1.1	1.0	1.0
Monocytic Leukemia	42	0.1	0.2	0.3	0.1	0.3
Other Leukemia	257	1.1	1.4	1.2	1.1	1.0
<b>III-Defined &amp; Unspecified Sites</b>	2,650	13.5	12.6	12.5	10.4	10.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 5. Age-adjusted Incidence Rates, Black Males**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>All Sites</b>	12,543	724.5	716.4	710.3	681.7	718.4
<b>Oral Cavity and Pharynx</b>	461	23.1	23.7	27.8	16.5	23.8
Lip	2	0.0	0.2	0.0	0.3	0.0
Tongue	115	5.6	4.6	7.3	5.5	5.8
Salivary Gland	30	0.9	1.4	3.4	0.8	1.0
Floor of Mouth	37	2.2	2.4	2.4	1.2	0.7
Gum and Other Mouth	61	3.9	5.0	2.1	1.4	3.9
Nasopharynx	26	0.9	1.5	0.8	0.5	1.7
Tonsil	69	3.2	2.3	5.1	2.4	3.1
Oropharynx	30	1.6	2.1	1.5	0.6	1.9
Hypopharynx	66	3.7	2.7	4.4	2.1	4.4
<b>Digestive System</b>	2,489	137.1	144.4	149.0	143.8	151.8
Esophagus	263	14.3	14.0	16.8	12.2	15.9
Stomach	337	21.6	21.7	19.0	21.0	18.7
Small Intestine	51	2.4	2.3	3.4	3.5	2.8
Colon and Rectum	1,286	72.1	73.2	78.2	73.4	83.1
Colon excluding Rectum	941	54.9	54.0	57.1	56.4	60.3
Rectum and Rectosigmoid Junction	345	17.1	19.2	21.1	17.0	22.8
Anus, Anal Canal and Anorectum	34	0.7	1.9	1.8	1.9	1.0
Liver and Intrahepatic Bile Duct	180	7.4	11.1	8.5	9.8	11.0
Liver	160	6.2	8.5	6.9	8.7	10.4
Intrahepatic Bile Duct	20	1.2	2.5	1.6	1.1	0.6
Gallbladder	17	1.0	1.7	1.6	1.3	0.2
Pancreas	266	13.3	15.5	15.2	19.1	16.0
<b>Respiratory System</b>	2,357	140.8	137.9	139.0	122.3	128.7
Larynx	254	16.0	14.9	11.1	12.0	15.4
Lung and Bronchus	2,061	122.5	119.2	125.7	108.4	111.8
<b>Bones and Joints</b>	20	1.0	0.9	0.8	0.3	0.3
<b>Soft Tissue (Including Heart)</b>	67	2.9	2.3	1.8	4.2	3.7
<b>Skin (Excluding Basal and Squamous)</b>	124	7.7	5.2	5.3	3.4	2.5
Melanoma of the Skin	17	0.6	1.3	0.7	1.0	0.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 5 (continued). Age-adjusted Incidence Rates, Black Males**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>Breast</b>	33	1.3	3.1	1.1	2.1	2.1
<b>Male Genital System</b>	4,811	284.6	289.0	260.1	280.4	292.3
Prostate	4,759	283.3	286.9	257.4	278.7	288.9
Testis	33	0.6	1.0	1.3	1.2	1.4
Penis	15	0.7	0.6	1.3	0.3	1.8
<b>Urinary System</b>	685	40.8	41.0	41.8	36.4	43.1
Urinary Bladder (Including in situ)	326	20.3	23.1	22.3	16.9	24.5
Kidney and Renal Pelvis	350	20.5	17.9	18.9	18.5	17.8
Ureter	4	0.0	0.0	0.2	0.2	0.6
<b>Eye and Orbit</b>	11	0.8	0.3	0.9	0.4	0.0
<b>Brain and Other Nervous System</b>	123	5.3	4.8	6.5	5.5	4.6
Brain	115	4.8	4.4	6.4	5.3	4.4
<b>Endocrine System</b>	76	3.2	3.3	2.1	3.2	5.9
Thyroid	53	2.4	2.1	1.6	2.3	4.3
<b>Lymphomas</b>	531	30.8	18.8	26.4	25.0	21.5
Hodgkin Lymphoma	94	3.4	3.5	3.5	5.1	3.3
Non-Hodgkin Lymphoma	437	27.4	15.2	22.8	19.9	18.2
<b>Myelomas</b>	228	14.0	13.4	14.7	12.1	13.9
<b>Leukemias</b>	226	8.4	14.6	14.3	10.7	8.6
Lymphocytic Leukemia	87	3.2	6.2	5.1	4.1	3.0
Acute Lymphocytic Leukemia	29	1.1	0.9	1.3	1.2	0.5
Chronic Lymphocytic Leukemia	54	1.9	4.8	3.7	2.9	2.5
Myeloid Leukemia	108	4.4	6.3	6.5	4.1	5.0
Acute Myeloid Leukemia	65	2.8	3.4	3.7	2.6	2.4
Chronic Myeloid Leukemia	42	1.6	2.8	2.7	1.5	2.6
Monocytic Leukemia	4	0.0	0.2	0.4	0.2	0.2
Other Leukemia	27	0.8	1.9	2.3	2.3	0.4
<b>Ill-Defined &amp; Unspecified Sites</b>	301	22.8	13.6	18.8	15.2	15.6

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 6. Age-adjusted Incidence Rates, Black Females**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>All Sites</b>	10,738	392.0	432.7	447.1	408.6	421.7
<b>Oral Cavity and Pharynx</b>	188	7.5	6.9	8.2	8.0	5.0
Lip	5	0.4	0.2	0.4	0.0	0.0
Tongue	44	1.7	1.5	1.3	2.5	1.0
Salivary Gland	25	1.1	1.1	1.1	0.8	0.5
Floor of Mouth	15	0.5	0.6	1.1	0.6	0.2
Gum and Other Mouth	36	1.2	1.4	2.3	1.0	1.4
Nasopharynx	13	0.6	0.6	0.4	0.5	0.4
Tonsil	22	1.4	0.4	0.5	1.0	0.7
Oropharynx	9	0.0	0.0	0.4	0.9	0.4
Hypopharynx	12	0.7	1.0	0.1	0.4	0.2
<b>Digestive System</b>	2,336	88.9	100.4	103.2	95.6	96.2
Esophagus	114	4.6	6.0	3.9	3.6	4.8
Stomach	253	9.6	11.8	11.8	9.5	10.4
Small Intestine	43	1.5	1.5	1.3	3.5	0.7
Colon and Rectum	1,402	53.2	60.5	61.5	56.8	57.3
Colon excluding Rectum	1,078	41.7	44.8	47.8	45.4	43.2
Rectum and Rectosigmoid Junction	324	11.5	15.7	13.7	11.4	14.1
Anus, Anal Canal and Anorectum	28	1.3	2.1	0.5	0.8	0.9
Liver and Intrahepatic Bile Duct	71	2.9	2.4	2.3	3.1	3.5
Liver	59	2.6	2.2	1.9	2.9	2.3
Intrahepatic Bile Duct	12	0.3	0.2	0.4	0.2	1.2
Gallbladder	55	2.5	1.9	4.0	1.6	2.1
Pancreas	326	11.3	12.9	14.6	14.9	15.3
<b>Respiratory System</b>	1,407	53.0	56.7	63.2	54.7	53.6
Larynx	66	2.6	1.8	3.7	2.3	2.1
Lung and Bronchus	1,314	49.4	53.4	58.6	52.0	50.2
<b>Bones and Joints</b>	16	0.3	0.3	0.8	0.8	0.3
<b>Soft Tissue (Including Heart)</b>	92	3.6	3.5	3.2	2.1	4.3
<b>Skin (Excluding Basal and Squamous)</b>	57	2.6	2.4	2.5	1.4	1.4
Melanoma of the Skin	28	1.0	1.7	1.1	0.6	0.9
<b>Breast (Invasive)</b>	3,109	111.4	119.5	121.3	110.1	127.3
in situ (not included in All Sites)	592	17.2	17.4	20.2	20.2	20.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 6 (continued). Age-adjusted Incidence Rates, Black Females**

Cancer Site	Total Cases	Rates				
		1996	1997	1998	1999	2000 Prelim.
<b>Female Genital System</b>	1,543	55.6	62.5	62.1	55.8	55.4
Cervix Uteri	500	18.9	19.8	18.0	16.5	17.6
Corpus and Uterus, NOS	598	22.0	24.4	26.4	22.1	21.7
Corpus Uteri	530	19.5	21.0	22.8	20.0	20.0
Uterus, NOS	68	2.5	3.5	3.6	2.1	1.6
Ovary	346	11.8	14.4	15.0	12.6	11.6
Vagina	27	0.9	1.3	0.5	0.9	1.5
Vulva	49	1.6	1.5	1.5	2.7	2.2
<b>Urinary System</b>	428	14.6	20.2	19.0	17.2	15.4
Urinary Bladder (Including in situ)	185	7.0	9.0	8.9	6.8	7.7
Kidney and Renal Pelvis	227	6.7	10.8	9.7	9.5	7.1
Ureter	3	0.5	0.0	0.0	0.0	0.2
<b>Eye and Orbit</b>	3	0.0	0.3	0.2	0.0	0.0
<b>Brain and Other Nervous System</b>	108	3.8	3.8	5.0	3.8	3.5
Brain	94	3.1	3.0	4.3	3.5	3.4
<b>Endocrine System</b>	174	4.4	5.8	4.0	5.3	10.6
Thyroid	157	3.6	4.9	3.4	5.1	10.2
<b>Lymphomas</b>	456	15.5	17.3	17.7	18.4	15.1
Hodgkin Lymphoma	81	3.3	1.7	2.8	2.6	2.7
Non-Hodgkin Lymphoma	375	12.2	15.6	15.0	15.9	12.5
<b>Myelomas</b>	260	7.4	10.7	12.9	10.2	12.5
<b>Leukemias</b>	205	7.9	10.2	8.1	6.7	8.0
Lymphocytic Leukemia	72	2.5	3.6	2.9	2.1	2.8
Acute Lymphocytic Leukemia	24	1.0	0.6	1.2	0.6	0.6
Chronic Lymphocytic Leukemia	44	1.0	3.0	1.5	1.4	2.3
Myeloid Leukemia	98	4.2	4.9	3.7	3.4	3.3
Acute Myeloid Leukemia	60	3.2	2.2	2.2	2.1	2.4
Chronic Myeloid Leukemia	35	1.0	2.4	1.3	1.1	0.9
Monocytic Leukemia	7	0.3	0.4	0.3	0.6	0.0
Other Leukemia	28	0.9	1.3	1.2	0.6	1.9
<b>III-Defined &amp; Unspecified Sites</b>	356	15.4	12.2	15.6	18.4	13.1

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 7. Age-adjusted Incidence Rates, Hispanic Males and Females  
1996-2000 Combined**

Cancer Site	Male Rate	Male Cases	Female Rate	Female Cases
<b>All Sites</b>	454.8	5,910	331.2	6,029
<b>Oral Cavity and Pharynx</b>	11.3	162	4.6	79
Lip	0.6	8	^	^
Tongue	3.3	45	1.2	21
Salivary Gland	0.7	12	1	18
Floor of Mouth	0.7	10	^	^
Gum and Other Mouth	1.8	25	1.1	19
Nasopharynx	0.8	14	^	^
Tonsil	0.9	15	^	^
Oropharynx	1.0	10	^	^
Hypopharynx	1.2	19	^	^
<b>Digestive System</b>	100.4	1,274	71.4	1,160
Esophagus	7.0	89	1.2	18
Stomach	16.0	212	8.0	133
Small Intestine	1.1	18	1.0	17
Colon and Rectum	51.2	642	41.7	680
Colon excluding Rectum	35.9	439	30.1	485
Rectum and Rectosigmoid Junction	15.3	203	11.6	195
Anus, Anal Canal and Anorectum	0.4	6	1.2	22
Liver and Intrahepatic Bile Duct	9.7	133	4.5	71
Liver	8.7	124	3.4	54
Intrahepatic Bile Duct	1.0	9	1.1	17
Gallbladder	1.5	17	3.0	47
Pancreas	11.2	130	8.7	136
<b>Respiratory System</b>	63.3	780	26.1	431
Larynx	5.6	80	1.2	22
Lung and Bronchus	55.4	663	24.2	397
<b>Bones and Joints</b>	1.0	23	1.2	28
<b>Soft Tissue (Including Heart)</b>	2.8	52	3.2	65
<b>Skin (Excluding Basal and Squamous)</b>	8.5	138	4.2	84
Melanoma of the Skin	5.6	78	3.1	59
<b>Breast (Invasive)</b>	0.5	9	94.2	1,780
in situ (not included in All Sites)	^	^	18.7	371

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

^ Statistic not displayed due to less than 5 cases.

\* Non-applicable gender

**Table 7 (continued). Age-adjusted Incidence Rates, Hispanic Males and Females  
1996-2000 Combined**

Cancer Site	Male Rate	Male Cases	Female Rate	Female Cases
<b>Female Genital System</b>	*	*	50.3	985
Cervix Uteri	*	*	15.2	337
Corpus and Uterus, NOS	*	*	18.6	335
Corpus Uteri	*	*	17.5	315
Uterus, NOS	*	*	1.1	20
Ovary	*	*	13.1	253
Vagina	*	*	0.7	12
Vulva	*	*	2.3	36
<b>Male Genital System</b>	162.3	1,954	*	*
Prostate	157.5	1,845	*	*
Testis	2.9	82	*	*
Penis	1.7	25	*	*
<b>Urinary System</b>	37.2	455	14.6	236
Urinary Bladder (Including in situ)	25.2	288	7.2	108
Kidney and Renal Pelvis	11.6	164	7.3	127
Ureter	^	^	^	^
<b>Eye and Orbit</b>	0.4	5	0.4	7
<b>Brain and Other Nervous System</b>	7.1	129	5.7	115
Brain	6.5	116	5.2	106
<b>Endocrine System</b>	3.7	71	11.0	258
Thyroid	3.1	57	10.3	243
<b>Lymphomas</b>	24.9	421	18.8	362
Hodgkin Lymphoma	2.8	67	2.5	60
Non-Hodgkin Lymphoma	22.0	354	16.3	302
<b>Myelomas</b>	6.9	80	5.4	85
<b>Leukemias</b>	12.7	208	8.9	181
Lymphocytic Leukemia	3.8	72	3.7	80
Acute Lymphocytic Leukemia	1.6	43	2.2	57
Chronic Lymphocytic Leukemia	1.9	23	1.4	21
Myeloid Leukemia	6.8	114	4.0	79
Acute Myeloid Leukemia	3.6	65	2.7	56
Chronic Myeloid Leukemia	2.9	45	1.1	21
Monocytic Leukemia	^	^	^	^
Other Leukemia	1.9	19	1.1	19
<b>III-Defined &amp; Unspecified Sites</b>	11.8	149	11.3	173

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

^ Statistic not displayed due to less than 5 cases.

\* Non-applicable gender



**Table 8. Comparative Incidence Rates, 5-Year Thyroid New Jersey and U.S., 1980-1999  
Males**

	<b>1980-1984</b>		<b>1985-1989</b>		<b>1990-1994</b>		<b>1995-1999</b>	
	<b>NJ</b>	<b>US</b>	<b>NJ</b>	<b>US</b>	<b>NJ</b>	<b>US</b>	<b>NJ</b>	<b>US</b>
<b>All races</b>	2.3	2.7	2.9	3.0	2.9	3.3	3.6	3.6
<b>White</b>	2.4	2.6	3.1	3.0	3.0	3.4	3.8	3.8
<b>Black</b>	1.2	1.6	1.6	1.3	1.7	2.2	2.1	1.7

Source-SEER Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

**Table 9. Comparative Incidence Rates, 5-Year Thyroid New Jersey and U.S., 1980-1999  
Females**

	<b>1980-1984</b>		<b>1985-1989</b>		<b>1990-1994</b>		<b>1995-1999</b>	
	<b>NJ</b>	<b>US</b>	<b>NJ</b>	<b>US</b>	<b>NJ</b>	<b>US</b>	<b>NJ</b>	<b>US</b>
<b>All races</b>	5.4	6.4	6.5	7.2	6.9	8.0	9.1	9.7
<b>White</b>	5.5	6.4	6.7	7.2	7.1	8.2	9.8	10.0
<b>Black</b>	4.1	3.8	4.1	4.0	4.8	4.8	4.6	5.6

Source SEER Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

**Table 10. Comparative Incidence Rates, New Jersey and U.S., 1995-1999**  
**Males**

<b>Cancer Site</b>	<b>New Jersey 1995-1999</b>			<b>United States 1995-1999</b>		
<b>Population:</b>	All Races Combined	White	Black	All Races Combined	White	Black
<b>All Sites</b>	622.4	618.4	708.9	559.5	550.0	652.1
<b>Colorectal</b>	78.6	79.6	76.0	67.5	67.3	69.1
<b>Lung</b>	93.1	91.8	118.5	91.5	89.9	120.8
<b>Prostate</b>	188.8	180.6	275.1	160.6	151.5	237.3
<b>Melanoma</b>	19.1	21.8	1.0	17.9	19.4	1.2
<b>Non-Hodgkin Lymphoma</b>	25.8	26.2	20.7	23.0	23.3	17.9

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

**Table 11. Comparative Incidence Rates, New Jersey and U.S., 1995-1999**  
**Females**

<b>Cancer Site</b>	<b>New Jersey 1995-1999</b>			<b>United States 1995-1999</b>		
<b>Population:</b>	All Races Combined	White	Black	All Races Combined	White	Black
<b>All Sites</b>	455.9	466.9	418.7	420.1	424.4	393.4
<b>Colorectal</b>	55.2	55.3	57.8	49.0	48.5	54.2
<b>Lung</b>	55.4	56.9	52.7	52.0	53.0	51.7
<b>Breast (invasive)</b>	139.4	144.5	115.6	131.9	134.3	114.2
<b>Melanoma</b>	11.4	13.2	0.9	11.5	12.7	0.9
<b>Non-Hodgkin Lymphoma</b>	18.4	19.0	13.9	15.9	16.3	10.8

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

**Table 12. Age-adjusted Mortality Rates, Males All Races Combined**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>All Sites</b>	36,216	274.3	261.5	258.5	256.0
<b>Oral Cavity and Pharynx</b>	636	4.9	4.6	4.2	4.0
Lip	5	0.0	0.0	0.1	0.1
Tongue	159	1.2	1.1	0.9	1.2
Salivary Gland	45	0.2	0.4	0.3	0.3
Floor of Mouth	17	0.3	0.0	0.1	0.1
Gum and Other Mouth	100	0.9	0.8	0.7	0.4
Nasopharynx	54	0.3	0.6	0.4	0.2
Tonsil	54	0.5	0.3	0.3	0.4
Oropharynx	55	0.2	0.6	0.3	0.4
Hypopharynx	36	0.3	0.2	0.3	0.2
<b>Digestive System</b>	9,408	70.4	67.8	65.1	68.4
Esophagus	1,111	7.3	7.6	8.0	7.9
Stomach	1,231	8.7	9.5	8.8	8.4
Small Intestine	61	0.2	0.3	0.4	0.7
Colon and Rectum	4,003	33.5	29.4	26.9	28.4
Colon excluding Rectum	3,410	28.2	25.7	22.7	24.4
Rectum and Rectosigmoid Junction	593	5.2	3.7	4.2	4.0
Anus	19	0.1	0.1	0.2	0.1
Liver and Intrahepatic Bile Duct	968	7.1	6.5	6.9	6.7
Liver	807	5.9	5.6	5.6	5.4
Intrahepatic Bile Duct	161	1.3	1.0	1.3	1.2
Gallbladder	92	0.7	0.7	0.6	0.7
Pancreas	1,732	11.5	12.2	12.3	13.7
<b>Respiratory System</b>	11,200	82.8	78.4	80.3	75.1
Larynx	423	3.1	3.2	2.9	2.7
Lung and Bronchus	10,683	79.1	74.6	76.6	71.7
<b>Bones and Joints</b>	81	0.5	0.6	0.5	0.5
<b>Soft Tissue (Including Heart)</b>	270	1.9	2.0	2.0	1.7
<b>Skin (Excluding Basal and Squamous)</b>	792	5.8	5.7	5.9	5.2
Melanoma of the Skin	635	4.8	4.5	4.6	4.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 12 (continued). Age-adjusted Mortality Rates, Males All Races Combined**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>Breast</b>	54	0.3	0.4	0.3	0.4
<b>Male Genital System</b>	4,218	36.9	33.7	33.4	30.3
Prostate	4,167	36.6	33.5	33.1	29.8
Testis	30	0.2	0.1	0.2	0.3
Penis	18	0.1	0.1	0.1	0.2
<b>Urinary System</b>	2,058	15.7	15.4	15.0	15.5
Urinary Bladder	1,189	9.2	9.4	8.9	9.6
Kidney and Renal Pelvis	833	6.2	5.8	6.0	5.5
Ureter	21	0.2	0.1	0.1	0.2
<b>Eye</b>	11	0.1	0.1	0.1	0.0
<b>Brain and Other Nervous System</b>	716	5.0	4.8	5.2	4.4
Brain	700	4.8	4.7	5.2	4.3
<b>Endocrine System</b>	101	0.7	0.5	0.6	0.9
Thyroid	52	0.3	0.2	0.3	0.6
<b>Lymphomas</b>	1,724	12.2	12.5	12.7	11.6
Hodgkin Lymphoma	90	0.6	0.5	0.6	0.7
Non-Hodgkin Lymphoma	1,634	11.5	12.0	12.1	10.9
<b>Multiple Myeloma</b>	633	4.9	4.9	4.6	4.1
<b>Leukemias</b>	1,513	10.7	11.1	10.6	11.2
Lymphocytic Leukemia	426	3.3	2.6	3.2	3.4
Acute Lymphocytic Leukemia	92	0.7	0.5	0.7	0.7
Chronic Lymphocytic Leukemia	317	2.5	2.1	2.4	2.6
Myeloid Leukemia	607	3.8	4.6	4.2	4.3
Acute Myeloid Leukemia	445	2.7	3.4	3.0	3.3
Chronic Myeloid Leukemia	146	1.0	1.1	1.1	0.9
Monocytic Leukemia	10	0.1	0.1	0.0	0.1
Other Leukemia	470	3.5	3.8	3.2	3.4
<b>III-Defined &amp; Unspecified Sites</b>	2,801	21.4	18.8	18.1	22.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 13. Age-adjusted Mortality Rates, Females All Races Combined**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>All Sites</b>	36,467	188.1	189.0	181.7	181.5
<b>Oral Cavity and Pharynx</b>	334	2.0	1.7	1.6	1.5
Lip	2	0.0	0.0	0.0	0.0
Tongue	96	0.6	0.5	0.5	0.3
Salivary Gland	37	0.2	0.2	0.2	0.2
Floor of Mouth	12	0.1	0.1	0.1	0.0
Gum and Other Mouth	72	0.4	0.3	0.3	0.4
Nasopharynx	24	0.2	0.1	0.1	0.2
Tonsil	19	0.0	0.1	0.1	0.1
Oropharynx	14	0.1	0.0	0.1	0.1
Hypopharynx	8	0.0	0.1	0.0	0.0
<b>Digestive System</b>	8,717	44.1	42.6	42.4	42.7
Esophagus	405	2.0	2.2	2.0	2.0
Stomach	913	4.5	4.4	4.7	4.5
Small Intestine	59	0.3	0.3	0.3	0.3
Colon and Rectum	4,209	21.5	20.1	20.7	20.1
Colon excluding Rectum	3,655	18.3	17.3	18.3	17.5
Rectum and Rectosigmoid Junction	554	3.1	2.7	2.4	2.6
Anus	27	0.2	0.1	0.1	0.2
Liver and Intrahepatic Bile Duct	597	3.2	2.9	3.0	2.9
Liver	415	2.4	2.0	2.0	1.9
Intrahepatic Bile Duct	182	0.8	0.9	0.9	1.0
Gallbladder	237	1.2	1.2	1.1	1.2
Pancreas	2,051	10.2	10.8	9.5	10.3
<b>Respiratory System</b>	8,409	43.5	44.3	43.2	41.2
Larynx	113	0.6	0.5	0.7	0.6
Lung and Bronchus	8,245	42.8	43.5	42.2	40.3
<b>Bones and Joints</b>	50	0.1	0.4	0.2	0.3
<b>Soft Tissue (Including Heart)</b>	284	1.8	1.6	1.4	1.3
<b>Skin (Excluding Basal and Squamous)</b>	468	2.6	2.5	2.3	2.2
Melanoma of the Skin	394	2.1	2.3	1.9	1.9
<b>Breast</b>	6,099	33.0	33.8	31.2	29.3

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 13 (continued). Age-adjusted Mortality Rates, Females All Races Combined**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>Female Genital System</b>	3,632	18.6	19.2	18.8	18.5
Cervix Uteri	583	3.2	3.5	2.9	3.2
Corpus and Uterus, NOS	993	4.9	5.2	5.5	4.5
Corpus Uteri	436	2.2	2.5	2.4	1.8
Uterus, NOS	557	2.8	2.7	3.1	2.7
Ovary	1,866	9.7	9.7	9.4	9.7
Vagina	48	0.2	0.2	0.2	0.3
Vulva	103	0.3	0.5	0.6	0.5
<b>Urinary System</b>	1,176	5.7	6.5	5.6	5.3
Urinary Bladder	590	2.9	3.2	2.6	2.6
Kidney and Renal Pelvis	560	2.7	3.1	2.8	2.6
Ureter	19	0.1	0.1	0.1	0.1
<b>Eye</b>	12	0.1	0.1	0.0	0.1
<b>Brain and Other Nervous System</b>	674	3.5	3.8	3.4	3.9
Brain	657	3.3	3.7	3.3	3.8
<b>Endocrine System</b>	158	0.8	0.9	0.9	0.7
Thyroid	106	0.4	0.7	0.4	0.6
<b>Lymphomas</b>	1,616	8.2	7.9	8.4	7.9
Hodgkin Lymphoma	90	0.5	0.6	0.4	0.5
Non-Hodgkin Lymphoma	1,526	7.7	7.4	7.9	7.4
<b>Multiple Myeloma</b>	684	3.3	3.4	3.6	3.3
<b>Leukemias</b>	1,244	6.6	6.1	6.1	6.3
Lymphocytic Leukemia	323	1.7	1.4	1.5	1.7
Acute Lymphocytic Leukemia	70	0.5	0.3	0.4	0.3
Chronic Lymphocytic Leukemia	237	1.1	1.1	0.9	1.3
Myeloid Leukemia	498	2.7	2.5	2.6	2.5
Acute Myeloid Leukemia	380	2.0	1.9	2.0	1.9
Chronic Myeloid Leukemia	108	0.7	0.6	0.6	0.5
Monocytic Leukemia	6	0.1	0.0	0.0	0.0
Other Leukemia	417	2.2	2.2	1.9	2.0
<b>III-Defined &amp; Unspecified Sites</b>	2,910	14.0	14.2	12.7	17.0

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 14. Age-adjusted Mortality Rates, White Males**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>All Sites</b>	31,322	270.0	258.4	254.9	253.5
<b>Oral Cavity and Pharynx</b>	477	4.4	4.0	3.7	3.4
Lip	5	0.0	0.0	0.1	0.1
Tongue	127	1.2	1.0	0.8	1.0
Salivary Gland	35	0.2	0.2	0.3	0.3
Floor of Mouth	13	0.3	0.0	0.1	0.1
Gum and Other Mouth	81	0.8	0.7	0.7	0.4
Nasopharynx	35	0.2	0.5	0.2	0.2
Tonsil	40	0.4	0.2	0.3	0.3
Oropharynx	34	0.2	0.5	0.2	0.2
Hypopharynx	25	0.3	0.2	0.2	0.1
<b>Digestive System</b>	8,039	68.4	66.4	64.1	66.5
Esophagus	914	6.7	7.1	7.9	7.5
Stomach	992	7.9	8.7	8.2	7.8
Small Intestine	52	0.2	0.3	0.5	0.7
Colon and Rectum	3,540	33.3	29.6	26.9	28.7
Colon excluding Rectum	3,023	27.9	25.9	22.7	24.9
Rectum and Rectosigmoid Junction	517	5.3	3.7	4.2	3.8
Anus	13	0.1	0.1	0.1	0.1
Liver and Intrahepatic Bile Duct	787	6.9	6.1	6.5	6.1
Liver	647	5.6	5.2	5.2	4.9
Intrahepatic Bile Duct	140	1.3	0.9	1.3	1.2
Gallbladder	83	0.8	0.6	0.6	0.8
Pancreas	1,487	11.4	12.4	12.2	12.9
<b>Respiratory System</b>	9,696	81.5	77.3	79.1	75.1
Larynx	348	2.9	3.1	2.7	2.6
Lung and Bronchus	9,262	77.9	73.7	75.6	71.7
<b>Bones and Joints</b>	72	0.5	0.7	0.5	0.6
<b>Soft Tissue (Including Heart)</b>	229	1.9	1.9	1.9	1.7
<b>Skin (Excluding Basal and Squamous)</b>	770	6.4	6.5	6.5	5.9
Melanoma of the Skin	629	5.4	5.1	5.3	4.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 14 (continued). Age-adjusted Mortality Rates, White Males**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>Breast</b>	42	0.3	0.3	0.3	0.4
<b>Male Genital System</b>	3,511	34.5	32.1	30.7	28.6
Prostate	3,464	34.1	31.9	30.3	28.1
Testis	27	0.3	0.1	0.2	0.3
Penis	17	0.1	0.1	0.1	0.2
<b>Urinary System</b>	1,864	16.3	15.4	15.8	15.8
Urinary Bladder	1,109	9.6	9.9	9.5	9.9
Kidney and Renal Pelvis	721	6.4	5.3	6.2	5.5
Ureter	20	0.2	0.2	0.1	0.2
<b>Eye</b>	11	0.1	0.1	0.1	0.0
<b>Brain and Other Nervous System</b>	659	5.5	5.0	5.6	4.7
Brain	647	5.3	4.9	5.5	4.7
<b>Endocrine System</b>	86	0.7	0.6	0.6	0.8
Thyroid	46	0.4	0.2	0.4	0.6
<b>Lymphomas</b>	1,542	12.6	12.9	13.0	11.8
Hodgkin Lymphoma	74	0.7	0.6	0.5	0.7
Non-Hodgkin Lymphoma	1,468	11.9	12.3	12.6	11.2
<b>Multiple Myeloma</b>	523	4.7	4.5	4.2	3.9
<b>Leukemias</b>	1,358	11.0	11.6	10.8	11.6
Lymphocytic Leukemia	379	3.4	2.6	3.2	3.5
Acute Lymphocytic Leukemia	74	0.7	0.3	0.7	0.7
Chronic Lymphocytic Leukemia	291	2.5	2.2	2.5	2.7
Myeloid Leukemia	532	3.7	4.7	4.3	4.3
Acute Myeloid Leukemia	397	2.7	3.6	3.1	3.4
Chronic Myeloid Leukemia	121	0.9	1.1	1.2	0.8
Monocytic Leukemia	10	0.1	0.1	0.1	0.1
Other Leukemia	437	3.8	4.2	3.2	3.7
<b>III-Defined and Unspecified Sites</b>	2,443	21.2	19.0	17.9	22.6

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard



**Table 15. Age-adjusted Mortality Rates, White Females**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>All Sites</b>	31,984	187.3	190.2	182.2	182.7
<b>Oral Cavity and Pharynx</b>	268	1.8	1.5	1.6	1.3
Lip	2	0.0	0.0	0.0	0.0
Tongue	82	0.6	0.5	0.5	0.3
Salivary Gland	35	0.2	0.2	0.2	0.2
Floor of Mouth	6	0.0	0.1	0.0	0.0
Gum and Other Mouth	61	0.4	0.2	0.3	0.4
Nasopharynx	15	0.2	0.1	0.0	0.1
Tonsil	10	0.0	0.1	0.1	0.0
Oropharynx	11	0.1	0.0	0.1	0.1
Hypopharynx	6	0.0	0.1	0.0	0.0
<b>Digestive System</b>	7,557	43.0	41.0	41.6	42.1
Esophagus	310	1.6	1.9	1.7	1.8
Stomach	758	4.3	4.1	4.4	4.0
Small Intestine	52	0.4	0.3	0.3	0.3
Colon and Rectum	3,688	21.2	19.3	20.5	20.2
Colon excluding Rectum	3,193	18.0	16.6	18.1	17.5
Rectum and Rectosigmoid Junction	495	3.2	2.7	2.4	2.6
Anus	27	0.2	0.1	0.2	0.2
Liver and Intrahepatic Bile Duct	519	3.1	2.8	2.9	2.8
Liver	351	2.2	1.9	2.0	1.8
Intrahepatic Bile Duct	168	0.8	0.9	0.9	1.1
Gallbladder	199	1.2	1.1	1.1	1.1
Pancreas	1,810	10.2	10.7	9.5	10.3
<b>Respiratory System</b>	7,476	44.3	45.4	43.9	42.1
Larynx	97	0.6	0.5	0.7	0.6
Lung and Bronchus	7,333	43.7	44.5	42.9	41.2
<b>Bones and Joints</b>	45	0.1	0.4	0.2	0.3
<b>Soft Tissue (Including Heart)</b>	241	1.6	1.7	1.4	1.4
<b>Skin (Excluding Basal and Squamous)</b>	458	3.0	2.9	2.6	2.4
Melanoma of the Skin	388	2.4	2.7	2.2	2.1
<b>Breast</b>	5,269	32.4	33.7	31.5	29.5

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 15 (continued). Age-adjusted Mortality Rates, White Females**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>Female Genital System</b>	3,133	18.1	19.5	18.9	18.3
Cervix Uteri	422	2.8	3.1	2.5	2.7
Corpus and Uterus, NOS	844	4.7	5.0	5.4	4.4
Corpus Uteri	377	2.0	2.4	2.5	1.8
Uterus, NOS	467	2.7	2.6	2.9	2.5
Ovary	1,693	9.8	10.4	10.0	10.2
Vagina	41	0.2	0.2	0.2	0.3
Vulva	98	0.4	0.6	0.6	0.5
<b>Urinary System</b>	1,049	5.7	6.5	5.4	5.6
Urinary Bladder	522	2.8	3.2	2.5	2.6
Kidney and Renal Pelvis	506	2.8	3.2	2.8	2.8
Ureter	16	0.1	0.1	0.1	0.1
<b>Eye</b>	12	0.1	0.1	0.0	0.1
<b>Brain and Other Nervous System</b>	625	3.8	4.1	3.8	4.2
Brain	613	3.7	4.0	3.7	4.1
<b>Endocrine System</b>	138	0.8	0.9	0.9	0.7
Thyroid	94	0.4	0.7	0.4	0.6
<b>Lymphomas</b>	1,468	8.4	8.3	8.6	8.3
Hodgkin Lymphoma	83	0.6	0.6	0.5	0.5
Non-Hodgkin Lymphoma	1,385	7.8	7.7	8.1	7.7
<b>Multiple Myeloma</b>	547	2.9	3.1	3.2	3.0
<b>Leukemias</b>	1,127	7.0	6.4	6.2	6.6
Lymphocytic Leukemia	302	1.8	1.5	1.5	1.9
Acute Lymphocytic Leukemia	64	0.5	0.3	0.5	0.4
Chronic Lymphocytic Leukemia	224	1.2	1.1	0.9	1.4
Myeloid Leukemia	444	2.9	2.6	2.7	2.6
Acute Myeloid Leukemia	344	2.1	2.1	2.1	2.1
Chronic Myeloid Leukemia	91	0.8	0.5	0.5	0.5
Monocytic Leukemia	6	0.1	0.0	0.0	0.0
Other Leukemia	375	2.2	2.2	2.0	2.0
<b>III-Defined &amp; Unspecified Sites</b>	2,571	14.3	14.7	12.4	16.9

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 16. Age-adjusted Mortality Rates, Black Males**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>All Sites</b>	4,407	363.9	334.8	340.3	326.8
<b>Oral Cavity and Pharynx</b>	141	8.5	9.6	9.5	10.5
Lip	0	0.0	0.0	0.0	0.0
Tongue	32	1.6	1.8	1.9	2.7
Salivary Gland	7	0.6	1.0	0.2	0.5
Floor of Mouth	3	0.2	0.0	0.2	0.2
Gum and Other Mouth	17	1.4	1.9	0.9	0.6
Nasopharynx	11	0.4	0.4	1.8	0.4
Tonsil	13	1.2	0.6	0.6	1.1
Oropharynx	20	0.7	1.6	0.9	2.0
Hypopharynx	9	0.5	0.5	0.6	0.8
<b>Digestive System</b>	1,167	97.1	89.1	78.7	89.5
Esophagus	180	13.7	13.5	10.3	13.2
Stomach	196	18.8	17.2	12.8	13.4
Small Intestine	7	0.5	0.6	0.0	0.8
Colon and Rectum	429	42.0	34.5	31.3	30.9
Colon excluding Rectum	358	36.9	29.7	26.0	23.5
Rectum and Rectosigmoid Junction	71	5.1	4.8	5.3	7.4
Anus	6	0.0	0.4	0.4	0.4
Liver and Intrahepatic Bile Duct	118	6.3	8.7	8.7	8.1
Liver	106	5.8	6.8	7.5	7.7
Intrahepatic Bile Duct	12	0.4	1.9	1.2	0.5
Gallbladder	5	0.2	0.5	1.1	0.0
Pancreas	209	14.2	12.3	13.9	19.9
<b>Respiratory System</b>	1,400	107.0	104.9	110.3	94.7
Larynx	68	3.7	5.4	6.2	4.2
Lung and Bronchus	1,325	103.1	98.7	103.7	90.0
<b>Bones and Joints</b>	8	0.8	0.4	0.6	0.2
<b>Soft Tissue (Including Heart)</b>	34	2.7	2.0	2.1	1.2
<b>Skin (Excluding Basal and Squamous)</b>	20	2.3	0.7	1.4	0.9
Melanoma of the Skin	5	0.6	0.2	0.2	0.4

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 16 (continued). Age-adjusted Mortality Rates, Black Males**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>Breast</b>	12	1.0	1.6	0.5	0.7
<b>Male Genital System</b>	679	75.4	58.5	71.1	56.6
Prostate	676	75.4	58.5	71.0	56.2
Testis	3	0.0	0.0	0.2	0.4
Penis	0	0.0	0.0	0.0	0.0
<b>Urinary System</b>	175	11.7	16.7	10.0	17.3
Urinary Bladder	75	6.6	6.3	4.5	8.9
Kidney and Renal Pelvis	99	5.1	10.4	5.5	8.2
Ureter	0	0.0	0.0	0.0	0.0
<b>Eye</b>	0	0.0	0.0	0.0	0.0
<b>Brain and Other Nervous System</b>	48	2.0	3.6	3.9	2.7
Brain	46	1.8	3.6	3.9	2.4
<b>Endocrine System</b>	11	1.0	0.3	0.5	1.2
Thyroid	4	0.0	0.3	0.4	0.5
<b>Lymphomas</b>	155	9.6	11.0	9.8	10.2
Hodgkin Lymphoma	16	0.5	0.5	1.0	1.3
Non-Hodgkin Lymphoma	139	9.1	10.5	8.9	8.8
<b>Multiple Myeloma</b>	102	7.1	9.3	9.2	6.1
<b>Leukemias</b>	129	9.5	7.9	9.6	8.5
Lymphocytic Leukemia	42	3.2	3.0	3.1	2.7
Acute Lymphocytic Leukemia	14	0.5	1.4	0.9	0.4
Chronic Lymphocytic Leukemia	25	2.8	1.5	1.6	2.2
Myeloid Leukemia	59	4.1	3.8	2.4	4.7
Acute Myeloid Leukemia	39	3.1	2.6	1.6	2.8
Chronic Myeloid Leukemia	18	1.0	1.2	0.6	1.5
Monocytic Leukemia	0	0.0	0.0	0.0	0.0
Other Leukemia	28	2.2	1.1	4.0	1.1
<b>III-Defined &amp; Unspecified Sites</b>	326	28.3	19.2	23.0	26.6

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 17. Age-adjusted Mortality Rates, Black Females**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>All Sites</b>	4,050	216.8	212.5	202.0	203.4
<b>Oral Cavity and Pharynx</b>	61	2.8	3.3	2.7	3.4
Lip	0	0.0	0.0	0.0	0.0
Tongue	14	1.1	0.5	0.2	0.8
Salivary Gland	1	0.0	0.0	0.1	0.0
Floor of Mouth	6	0.2	0.4	0.6	0.0
Gum and Other Mouth	11	0.4	1.0	0.7	0.4
Nasopharynx	6	0.0	0.0	0.7	0.6
Tonsil	9	0.4	0.4	0.2	0.8
Oropharynx	3	0.4	0.0	0.2	0.0
Hypopharynx	2	0.0	0.2	0.0	0.2
<b>Digestive System</b>	1,027	53.6	60.3	52.0	53.6
Esophagus	89	5.3	5.4	4.4	3.4
Stomach	121	5.3	6.4	5.8	8.1
Small Intestine	5	0.3	0.0	0.5	0.2
Colon and Rectum	480	26.0	30.0	24.8	22.8
Colon excluding Rectum	427	23.1	26.7	22.7	19.7
Rectum and Rectosigmoid Junction	53	2.9	3.2	2.2	3.0
Anus	0	0.0	0.0	0.0	0.0
Liver and Intrahepatic Bile Duct	59	3.1	3.1	2.5	3.6
Liver	49	2.8	2.7	1.4	3.4
Intrahepatic Bile Duct	10	0.4	0.4	1.1	0.2
Gallbladder	30	1.4	2.2	1.2	1.7
Pancreas	221	10.9	12.5	11.1	12.9
<b>Respiratory System</b>	863	45.4	42.4	46.0	43.3
Larynx	16	0.6	0.6	1.3	0.6
Lung and Bronchus	842	44.3	41.7	44.6	42.2
<b>Bones and Joints</b>	4	0.2	0.2	0.1	0.2
<b>Soft Tissue (Including Heart)</b>	36	3.2	1.3	1.1	0.9
<b>Skin (Excluding Basal and Squamous)</b>	9	0.5	0.3	0.3	0.8
Melanoma of the Skin	6	0.5	0.3	0.2	0.4
<b>Breast</b>	759	43.6	40.0	34.4	32.8

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 17 (continued). Age-adjusted Mortality Rates, Black Females**

Cancer Site	Total Cases	Rates			
		1996	1997	1998	1999
<b>Female Genital System</b>	445	24.9	22.5	19.2	22.6
Cervix Uteri	145	6.8	7.2	5.8	7.9
Corpus and Uterus, NOS	135	7.3	7.9	6.9	6.4
Corpus Uteri	55	3.9	3.5	2.5	1.4
Uterus, NOS	80	3.4	4.4	4.4	5.0
Ovary	150	10.1	7.0	5.7	7.2
Vagina	6	0.4	0.3	0.5	0.0
Vulva	5	0.0	0.0	0.2	0.8
<b>Urinary System</b>	118	6.4	7.5	7.8	4.2
Urinary Bladder	62	3.7	4.2	4.2	1.9
Kidney and Renal Pelvis	52	2.4	3.0	3.3	2.1
Ureter	3	0.3	0.0	0.3	0.2
<b>Eye</b>	0	0.0	0.0	0.0	0.0
<b>Brain and Other Nervous System</b>	41	2.2	1.9	1.5	2.2
Brain	37	1.8	1.9	1.3	2.1
<b>Endocrine System</b>	19	0.9	1.0	0.7	1.0
Thyroid	11	0.4	0.8	0.2	0.7
<b>Lymphomas</b>	131	7.4	6.5	6.3	5.7
Hodgkin Lymphoma	7	0.3	0.6	0.2	0.0
Non-Hodgkin Lymphoma	124	7.1	5.9	6.1	5.7
<b>Multiple Myeloma</b>	129	7.5	6.6	7.0	6.3
<b>Leukemias</b>	103	4.5	5.3	6.4	5.2
Lymphocytic Leukemia	19	0.6	0.9	1.4	0.9
Acute Lymphocytic Leukemia	4	0.3	0.2	0.0	0.2
Chronic Lymphocytic Leukemia	13	0.3	0.7	1.0	0.8
Myeloid Leukemia	47	1.8	2.3	3.2	2.2
Acute Myeloid Leukemia	30	1.8	0.8	2.2	1.2
Chronic Myeloid Leukemia	16	0.0	1.5	1.1	0.7
Monocytic Leukemia	0	0.0	0.0	0.0	0.0
Other Leukemia	37	2.1	2.1	1.7	2.1
<b>III-Defined &amp; Unspecified Sites</b>	305	13.7	13.3	16.7	21.3

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

**Table 18. Age-adjusted Mortality Rates, Hispanic Males and Females  
1996-1999 Combined**

<b>Cancer Site</b>	<b>Male Rate</b>	<b>Male Cases</b>	<b>Female Rate</b>	<b>Female Cases</b>
<b>All Sites</b>	119.1	1,161	78.0	1,054
<b>Oral Cavity and Pharynx</b>	1.9	22	1.0	13
Lip	0.0	0	0.0	0
Tongue	0.5	6	0.4	5
Salivary Gland	0.0	0	^	^
Floor of Mouth	^	^	0.0	0
Gum and Other Mouth	0.5	5	^	^
Nasopharynx	0.0	0	0.0	0
Tonsil	^	^	0.0	0
Oropharynx	^	^	^	^
Hypopharynx	0.0	0	^	^
<b>Digestive System</b>	35.0	343	21.3	271
Esophagus	3.8	38	0.5	5
Stomach	6.2	64	3.3	45
Small Intestine	^	^	^	^
Colon and Rectum	12.0	117	8.8	115
Colon excluding Rectum	9.3	91	7.9	103
Rectum and Rectosigmoid Junction	2.7	26	0.9	12
Anus	^	^	0.0	0
Liver and Intrahepatic Bile Duct	5.7	55	2.9	35
Liver	5.1	51	2.4	29
Intrahepatic Bile Duct	^	^	0.5	6
Gallbladder	0.6	5	0.9	10
Pancreas	5.7	54	4.1	50
<b>Respiratory System</b>	30.8	305	9.1	122
Larynx	1.9	21	^	^
Lung and Bronchus	28.4	279	8.8	116
<b>Bones and Joints</b>	^	^	^	^
<b>Soft Tissue (Including Heart)</b>	0.6	8	0.8	13
<b>Skin (Excluding Basal and Squamous)</b>	1.3	14	0.5	6
Melanoma of the Skin	1.1	12	0.4	5
<b>Breast</b>	^	^	13.8	195

Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

\* Non-applicable gender

^ Rates not calculated for fewer than five cases

**Table 18 (continued). Age-adjusted Mortality Rates, Hispanic Males and Females  
1996-1999 Combined**

<b>Cancer Site</b>	<b>Male Rate</b>	<b>Male Cases</b>	<b>Female Rate</b>	<b>Female Cases</b>
<b>Female Genital System</b>	*	*	9.4	133
Cervix Uteri	*	*	2.6	43
Corpus and Uterus, NOS	*	*	2.4	31
Corpus Uteri	*	*	1.3	15
Uterus, NOS	*	*	1.2	16
Ovary	*	*	3.8	53
Vagina	*	*	0.0	0
Vulva	*	*	^	^
<b>Male Genital System</b>	16.3	116	*	*
Prostate	15.8	111	*	*
Testis	^	^	*	*
Penis	^	^	*	*
<b>Urinary System</b>	6.0	55	2.5	31
Urinary Bladder	3.5	27	1.4	16
Kidney and Renal Pelvis	2.3	26	1.1	15
Ureter	^	^	0.0	0
<b>Eye</b>	^	^	0.0	0
<b>Brain and Other Nervous System</b>	1.8	24	1.3	22
Brain	1.8	23	1.3	22
<b>Endocrine System</b>	0.5	5	^	^
Thyroid	^	^	^	^
<b>Lymphomas</b>	7.1	78	4.6	63
Hodgkin Lymphoma	0.6	6	^	^
Non-Hodgkin Lymphoma	6.6	72	4.5	62
<b>Multiple Myeloma</b>	1.8	16	2.3	27
<b>Leukemias</b>	6.5	74	3.8	58
Lymphocytic Leukemia	1.5	21	1.1	17
Acute Lymphocytic Leukemia	0.7	15	0.4	9
Chronic Lymphocytic Leukemia	0.8	6	0.6	7
Myeloid Leukemia	2.9	32	1.5	24
Acute Myeloid Leukemia	2.0	22	1.1	18
Chronic Myeloid Leukemia	0.9	9	0.4	6
Monocytic Leukemia	^	^	0.0	0
Other Leukemia	2.0	20	1.3	17
<b>III-Defined &amp; Unspecified Sites</b>	8.9	93	7.3	95



## ***Cancer Incidence and Mortality in New Jersey, 1996-2000***

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Rates are per 100,000 and age-adjusted to the 2000 U.S. population standard

\* Non-applicable gender

^ Rates not calculated for fewer than five cases

**Table 19. Comparative Mortality Rates, New Jersey and U.S., 1995-1999**  
**Males**

<b>Cancer Site</b>	<b>New Jersey 1995-1999</b>			<b>United States 1995-1999</b>		
<b>Population:</b>	All Races Combined	White	Black	All Races Combined	White	Black
<b>All Sites</b>	265.7	261.6	349.6	259.1	253.0	359.2
<b>Lung</b>	76.1	75.1	100.6	81.2	79.1	109.1
<b>Prostate</b>	34.2	31.8	68.9	33.9	31.2	72.8
<b>Colorectal</b>	30.2	30.3	34.9	26.3	25.8	34.4

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

**Table 20. Comparative Mortality Rates, New Jersey and U.S., 1995-1999**  
**Females**

<b>Cancer Site</b>	<b>New Jersey 1995-1999</b>			<b>United States 1995-1999</b>		
<b>Population:</b>	All Races Combined	White	Black	All Races Combined	White	Black
<b>All Sites</b>	186.2	186.4	212.6	171.4	169.8	203.5
<b>Lung</b>	42.1	42.8	44.1	41.0	41.7	40.2
<b>Breast</b>	32.2	32.2	37.6	28.8	28.2	37.1
<b>Colorectal</b>	20.9	20.6	26.4	18.5	18.0	25.4

Source-NAACCR Age-adjusted rates per 100,000 (U.S. 2000 Standard population)

**Table 21. Population Denominators**

	1996						1997					
	All races	All races	White	White	Black	Black	All races	All races	White	White	Black	Black
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
00-04	291,594	278,712	222,054	211,751	52,126	50,137	285,850	273,245	215,969	205,754	51,006	49,152
05-09	294,322	281,031	226,234	215,937	52,097	50,403	298,555	285,196	228,627	218,173	53,076	51,454
10-14	270,381	256,744	205,883	194,930	47,582	45,639	273,504	259,752	207,739	197,006	48,136	46,076
15-19	260,395	245,929	196,898	184,440	48,193	46,374	262,948	248,362	198,476	185,779	48,391	46,711
20-24	238,735	233,087	181,947	175,348	42,959	42,673	237,454	231,381	180,674	173,468	42,350	42,686
25-29	262,425	264,772	203,537	200,281	44,089	46,300	255,310	257,965	195,990	193,358	43,782	45,744
30-34	332,644	341,103	263,646	263,225	49,016	54,235	324,013	333,029	254,906	254,295	48,390	53,698
35-39	355,385	364,037	286,323	287,832	47,722	53,336	358,804	367,477	287,774	289,447	49,002	54,343
40-44	312,532	330,032	255,538	263,720	38,623	46,062	323,048	340,440	262,831	271,366	40,599	47,404
45-49	279,235	295,870	231,266	238,921	32,333	40,183	276,011	292,803	226,757	234,140	32,902	41,142
50-54	218,968	233,079	182,657	190,539	24,394	31,009	236,737	251,484	198,492	206,438	25,348	32,119
55-59	171,633	187,090	142,378	152,457	20,811	26,465	177,978	193,949	147,488	157,257	21,262	27,653
60-64	147,855	165,052	125,585	137,644	16,602	21,502	147,288	163,937	124,187	135,615	16,708	21,760
65-69	143,898	175,342	125,819	151,456	14,469	19,107	140,920	171,257	122,345	146,750	14,623	19,403
70-74	121,551	163,437	109,250	145,788	9,529	13,801	120,934	161,801	108,154	143,531	9,775	14,100
75-79	91,372	136,487	83,246	123,559	6,347	10,416	93,835	138,539	85,313	125,123	6,592	10,649
80-84	53,038	94,757	48,779	86,886	3,165	6,469	54,783	96,809	50,264	88,543	3,311	6,708
85+	33,590	86,381	30,662	79,598	2,262	5,787	35,122	88,594	31,945	81,580	2,371	5,839
Total	3,879,553	4,132,942	3,121,702	3,304,312	552,319	609,898	3,903,094	4,156,020	3,127,931	3,307,623	557,624	616,641

	1998						1999					
	All races	All races	White	White	Black	Black	All races	All races	White	White	Black	Black
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
00-04	282,152	269,914	211,372	201,383	50,525	48,687	281,073	269,105	209,464	199,119	50,083	48,710
05-09	300,272	286,679	229,164	218,615	53,535	51,838	300,539	286,963	228,835	218,389	53,477	51,674
10-14	279,044	265,089	211,229	200,699	49,368	47,270	288,121	273,737	217,585	206,874	51,111	49,091
15-19	265,807	251,122	200,264	187,438	48,647	46,861	267,291	252,664	201,434	188,808	48,366	46,506
20-24	236,658	230,146	179,753	172,114	42,373	42,470	237,523	230,502	179,730	171,731	42,907	42,790
25-29	250,248	253,220	191,087	188,569	43,065	45,206	245,324	248,009	186,165	183,698	42,354	44,415
30-34	313,297	322,496	245,039	243,931	47,177	52,980	302,136	310,826	231,048	233,829	45,476	51,429
35-39	359,546	368,247	286,760	288,029	50,030	55,230	358,562	367,108	284,499	285,406	50,504	55,553
40-44	333,041	350,217	269,721	278,144	42,504	48,972	341,270	358,173	274,840	283,640	44,224	50,319
45-49	278,938	295,867	228,481	235,598	33,432	41,806	284,369	301,345	232,659	239,768	34,068	42,286
50-54	241,871	257,097	201,816	209,837	26,248	33,294	249,398	265,221	207,179	215,352	27,542	34,635
55-59	188,715	205,359	157,072	167,067	21,730	28,442	195,314	212,529	162,761	172,869	21,991	29,056
60-64	148,785	165,150	124,549	135,624	17,139	22,464	150,946	167,435	125,494	136,599	17,687	23,239
65-69	137,176	166,746	118,135	141,451	14,659	19,774	134,430	162,552	114,944	136,854	14,667	19,816
70-74	121,888	161,082	108,485	142,110	10,175	14,506	121,296	158,957	107,253	139,462	10,601	14,797
75-79	95,784	140,048	86,722	125,995	6,874	10,955	97,835	142,098	88,367	127,597	7,047	11,141
80-84	56,495	98,269	51,670	89,926	3,507	6,615	57,869	99,659	52,834	91,099	3,637	6,705
85+	37,028	91,486	33,585	83,953	2,490	6,154	39,024	94,262	35,216	86,223	2,723	6,445
Total	3,926,745	4,178,234	3,134,904	3,310,483	563,478	623,524	3,952,320	4,201,145	3,140,307	3,317,317	568,465	628,607

	2000					
	All races	All races	White*	White*	Black*	Black*
	Males	Females	Males	Females	Males	Females
00-04	288,085	275,700	189,620	180,670	45,204	43,781
05-09	309,563	294,966	206,641	196,671	51,894	49,772
10-14	302,708	287,869	205,869	194,927	49,799	48,255
15-19	271,020	254,196	179,476	167,335	44,665	43,268
20-24	244,628	235,451	155,301	147,934	39,242	40,918
25-29	272,873	272,044	175,410	173,413	39,699	44,025
30-34	319,031	325,092	217,771	219,687	43,922	49,713
35-39	360,230	367,694	259,036	261,812	46,777	52,466
40-44	348,061	359,121	260,026	264,000	41,100	47,394
45-49	297,845	313,512	229,258	235,963	32,484	39,701
50-54	263,357	284,184	207,146	218,535	27,404	35,053
55-59	202,559	220,779	161,012	172,383	21,646	27,706
60-64	156,073	174,573	123,644	136,261	17,834	23,072
65-69	132,558	160,638	109,864	130,802	13,636	18,497
70-74	121,639	159,834	105,320	136,783	10,315	14,775
75-79	95,560	144,571	85,103	127,606	6,743	11,213
80-84	58,291	104,046	52,899	93,562	3,465	7,134
85+	38,732	97,267	35,016	87,949	2,380	6,869
Total	4,082,813	4,331,537	2,958,412	3,146,293	538,209	603,612

Source: The National Cancer Institute's SEER Program and U S Census Bureau (year 2000). \* Pops for Races White, Black = Alone

**Table 21. Population Denominators**

Hispanic Populations, 1996-2000

	All races						All races					
	Total Males	1996 Males	1997 Males	1998 Males	1999 Males	2000 Males	Total Females	1996 Females	1997 Females	1998 Females	1999 Females	2000 Females
00-04	241,876	46,893	47,229	47,878	49,118	50,758	230,262	44,393	44,886	45,573	46,797	48,613
05-09	229,054	41,519	44,162	45,961	47,701	49,711	219,063	39,873	42,247	44,076	45,520	47,347
10-14	204,324	37,382	38,660	40,305	42,207	45,770	193,922	35,200	36,462	38,107	39,979	44,174
15-19	210,320	39,436	40,473	41,070	41,201	48,140	195,580	37,187	38,009	38,544	38,974	42,866
20-24	210,011	37,226	38,023	39,103	39,547	56,112	200,301	36,551	38,030	38,961	39,417	47,342
25-29	214,376	39,311	39,303	39,368	39,738	56,656	210,105	39,260	39,616	40,407	41,042	49,780
30-34	241,614	46,562	47,110	46,808	45,758	55,376	237,820	45,535	46,725	47,056	47,175	51,329
35-39	235,801	43,089	45,029	47,063	48,611	52,009	231,358	42,409	44,409	46,505	48,085	49,950
40-44	186,436	33,220	35,391	37,201	39,348	41,276	192,721	34,835	36,815	38,824	40,511	41,736
45-49	142,303	26,247	27,306	28,404	29,476	30,870	151,846	28,080	29,251	30,399	31,488	32,628
50-54	110,936	19,817	21,082	22,247	23,358	24,432	122,296	22,026	23,392	24,550	25,520	26,808
55-59	86,204	16,164	16,740	17,576	18,120	17,604	97,297	17,892	18,915	19,896	20,769	19,825
60-64	65,709	12,156	12,708	13,256	13,878	13,711	75,154	13,897	14,568	15,179	15,855	15,655
65-69	48,966	9,356	9,697	10,031	10,361	9,521	61,419	11,379	12,030	12,633	13,346	12,031
70-74	34,738	6,281	6,769	7,272	7,866	6,550	45,844	8,457	8,946	9,538	10,046	8,857
75-79	21,406	3,884	4,210	4,546	5,003	3,763	32,625	6,054	6,370	6,872	7,359	5,970
80-84	11,971	2,223	2,387	2,613	2,821	1,927	21,892	4,183	4,484	4,709	4,906	3,610
85+	8,827	1,644	1,741	1,940	2,143	1,359	19,548	3,511	3,860	4,313	4,739	3,125
Total	2,504,872	462,410	478,020	492,642	506,255	565,545	2,539,053	470,722	489,015	506,142	521,528	551,646

Source: The National Cancer Institute's SEER Program and U S Census Bureau (year 2000).